REDUCING THE LOGISTICAL FOOTPRINT OF FORWARD RESUSCITATIVE SURGICAL UNITS USING A PATIENT-DRIVEN **MODEL OF CLINICAL EVENTS**

M. R. Galarneau P. J. Konoske K. E. Emens-Hesslink G. Pang

19980323 122

Report No. 98-1

DITTO QUALLEY LANGUAGE (

Approved for public release: distribution unlimited.

NAVAL HEALTH RESEARCH CENTER P. O. BOX 85122 SAN DIEGO, CALIFORNIA 92186 - 5122





Reducing the Logistical Footprint of Forward Resuscitative Surgical Units Using a Patient-Driven Model of Clinical Events

Michael R. Galarneau¹
Paula J. Konoske¹
Kristee E. Emens-Hesslink²
Gerald Pang¹

¹Naval Health Research Center Medical Information Systems and Operation Research Department P.O. Box 85122 San Diego, CA 92186-5122

> ²GEO-Centers, Inc. Seven Wells Avenue Newton Centre, MA 02159

Report No. 98-1, supported by the Office of Naval Research, Arlington, VA, Department of the Navy, under Work Unit No. 63706N-M0095-6510. The views expressed in this article are those of the authors and do not reflect the official policy or position of the Department of Defense or the U.S. Government. Approved for public release; distribution is unlimited.

TABLE of CONTENTS

Summary	iii
Introduction	1
Method	2
NHRC Medical Supply Model	2
Data Collection	2
Projecting Medical Supply Requirements	4
Results and Discussion	5
PC Surgical Candidates	5
Forward Resuscitative Procedures	5
Number of Surgical Cases per AMAL Block	7
Operating Room Equipment AMAL 639 Requirements	8
Operating Room Consumable AMAL 640 Requirements	9
Conclusions	11
References	12
Appendices	
A. DEPMEDS Patient Conditions & Forward Surgical Candidates	A-1
B. Operating Room Equipment Sets	B-1
C. Proposed AMAL 639 - Operating Room Equipment	C-1
D. Consumable Requirements for Operating Room Procedures	D-1
E. Proposed AMAL 640 - Operating Room Consumables	E-1

Summary

Problem

As expressed in Marine Corps guidance Operational Maneuver from the Sea (OMFTS)¹, the Marine Corps is evolving into a rapid reaction force with a sea-based operational station that will allow rapid progress from ship to objective with no large or lengthy buildup on shore. Moving towards a concept of medical organization that can begin to achieve these objectives brings particular challenges when examining forward resuscitative surgical units. Surgical units must be small enough to perform abbreviated, staged surgical procedures in forward areas in order to accommodate today's operational requirements for greater battlefield mobility.

Objective

The primary objective of this project is to develop a model of the far forward medical supply stream that links specific clinical requirements to individual medical treatment items. This process produces an audit trail for each item in the Marine Corps supply system. The audit trail provides medical planners and logisticians with a management tool for maintaining and updating supplies linking the AMAL materiel with Marine Corps specific requirements. In the present paper, scenario-specific requirements also are used to determine the optimal medical configuration necessary to support forward resuscitative surgery.

Approach

One hundred fifteen clinical Subject Matter Experts (SMEs) with operational experience assisted in the development of Marine Corps specific treatment profiles for the 350 DEPMEDS Patient Conditions (PCs). The PCs reflected the range of injuries, diseases and non-battle injuries known to occur in theater. From the treatment profiles, the specific medical tasks performed forward for each PC were identified. Then, medical consumables and equipment were assigned by the SMEs to each task and its associated PC, establishing a clinical requirement for each piece of materiel. Following the establishment of the clinical requirements for the supply items, a revised operating room equipment AMAL 639 was produced and compared to the current operating room equipment AMAL.

To determine the amount and type of consumable supply requirements for the operating room consumable AMAL 640, a patient generating model, PATGEN, was used to project the frequency of PCs likely to occur in theater. A computer program was developed to determine the number and types of operating room procedures that would need to be conducted to effectively provide resuscitative surgery to the projected casualty load. Using knowledge of the type and frequency of surgical tasks to be performed, the type and quantity of medical materiel was then derived. When the supply composition of the

proposed consumable AMAL 640 had been determined, it was compared to the current Marine Corps operating room consumable AMAL 640.

Results

An examination of the treatment profiles showed that 72 of the 350 PCs qualified as potential forward surgical candidates. From the treatment profiles, 14 surgical procedures and 9 non-surgical operating room tasks were identified.

Casualty projections were calculated for each surgical candidate PC and the supplies necessary to surgically stabilize and resuscitate those PCs generated. An examination of the supply requirements showed that when compared to the current operating room AMAL configurations, reductions in number of items, weight and cube were realized for both the equipment and consumable operating room AMALs. The percent reductions are shown below.

Percent Reduction In Proposed AMALs When Compared to Current AMALs

	Operating Room Equipment AMAL 639	Operating Room Consumable AMAL 640
No. of Items	-23.9%	-28.5%
Weight (lbs.)	-15.0%	-22.4%
Volume (cu. ft.)	-13.2%	-36.3%

Conclusions

It was demonstrated that significant reductions in the logistical burden carried by Marine Corps forces can be achieved by modeling the clinically relevant elements of the theater of operations. Developing clinical profiles and assigning supplies to achieve a desired level of care as defined by mission, policy, and doctrine allows medical support to be more scenario-based and more capable of rapid and efficient delivery. As policy and doctrine continue to evolve, the model presented in this paper can be modified to project medical supply requirements for the continually changing scope of the forward medical mission.

Reducing the Logistical Footprint of Forward Resuscitative Surgical Units Using a Patient-Driven Model of Clinical Events

INTRODUCTION

Marine Corps medical units are currently engaging in a re-examination of the methods in which they provide health care to deployed units. As expressed in Marine Corps guidance Operational Maneuver from the Sea (OMFTS)¹, the Marine Corps is evolving into a rapid reaction force, with a sea-based operational station that will allow rapid progress from ship to objective with no large or lengthy buildup on shore. Moving units rapidly and effectively requires streamlining operations to improve responsiveness. Furthermore, objectives identified in the Medical Readiness Strategic Plan 2001 (MRSP-2001) outline the necessity of tailoring medical capability to support evolving doctrinal guidance. To achieve these objectives, MRSP-2001 challenges the medical community to develop and implement more flexible and mobile medical units².

Moving toward a concept of medical organization that can begin to achieve these objectives brings particular challenges when examining forward resuscitative surgical units. Surgical units must be small enough to perform abbreviated, staged surgical procedures in forward areas in order to accommodate today's operational requirements for greater battlefield mobility³. Accomplishing this objective requires reducing the logistical footprint of the forward resuscitative surgical function. This reduction, however, must occur without compromising the quality of clinical care rendered by the forward forces.

Matching the speed and mobility of assault forces requires the development of flexible and efficient Authorized Medical Allowance Lists (AMALs). Mission-specific standards of care and clinical requirements for the items pushed forward must be established so that only those items required to achieve the standards of care are stocked. In this way the medical support is scenario-based and capable of quick and efficient delivery.

Recent efforts at the Naval Health Research Center (NHRC) have yielded significant reductions in materiel requirements for some forward area supply blocks by applying such an approach^{4,5}. By identifying the doctrinally defined standard of care and by establishing the clinical requirements for items needed to attain that level of care, NHRC has reduced the logistical burden carried by the medical battalions without reducing the level or quality of care provided. These reductions in materiel were achieved (1) by establishing the clinical requirement for each item and by including only those items with an identified requirement in the supply stream, and (2) by incorporating the element of scenario-specific operational parameters that would likely impact supply projections. In the present study, both of these elements were incorporated in a model that was used to produce the optimal medical supply configuration necessary to support operating room functional requirements for forward resuscitative surgical capability.

METHOD

The NHRC model was designed to interface with the Echelons III and IV Deployable Medical Systems (DEPMEDS) model⁶. The DEPMEDS model, which consists of databases arranged in a relational structure named the "Time, Task, Treater" files, was developed to standardize medical materiel and to assemble it into sets so that each of the services could configure medical facilities according to its own unique requirements. The data in the DEPMEDS model are based upon treatment protocols for 319 (numbered 1-350) Patient Conditions (PCs), each representing a grouping of closely related diagnoses, which are considered representative of the injuries expected to occur in theater⁷. To build upon this existing standard, the structural characteristics of the Echelon I and II NHRC databases are compatible with those of the DEPMEDS Time, Task, Treater files. Because both the DEPMEDS and NHRC models share a common structural design, the two models can eventually be combined to produce a seamless methodology for projecting medical materiel requirements from the First through the Fourth Echelon.

NHRC Medical Supply Model

The 350 DEPMEDS PCs form the core around which the NHRC Echelon I and II model was developed (see Appendix A for a complete list). The medical tasks required to treat these PCs at the three levels of care under investigation (Echelon Ia-Battlefield, Echelon Ib-Battalion Aid Station, and Echelon II-Surgical Company) were identified.* This process produced a preliminary, step-by-step treatment protocol for each PC. These PC treatment protocols were then used to assign the consumable and equipment requirements necessary to administer each of the medical tasks.

Data Collection

The next phase in development of the model required Subject Matter Experts (SMEs) experienced in Marine Corps Echelon I and II medical care to (1) validate the treatment tasks and their assignments to the PCs, and (2) identify the appropriate consumable and equipment stream for each of the tasks. To achieve this objective, surveys were constructed for each of the PCs and mailed to SMEs with operational field medical experience.

<u>Participants.</u> One hundred fifteen professionals experienced in combat casualty care participated in the study. These SMEs were drawn from 20 Navy/Marine Corps commands (see Table 1). The medical specialties within this group of SMEs consisted of 44 physicians, surgeons, and anesthesiologists, 6 physician's assistants, 1 pharmacist, 5 nurse anesthetists, 7 general care nurses, 17 surgical technicians, 12 laboratory/x-ray technicians and 23 Independent Duty Corpsmen medical course instructors. All but 6 SMEs had significant theater operational experience administering combat casualty care at the forward echelons.

^{*} Preliminary identification of the required tasks was conducted with support from the Army's Medical Doctrine Development Center (AMEDD) Ft. Sam Houston, TX.

Table 1
Subject Matter Expert Command Representation

1 st Medical Battalion	1 st Medical Logistics Command
Camp Pendleton, CA	Camp Pendleton, CA
2 nd Medical Battalion	2 nd Medical Logistics Command
Camp Lejeune, NC	Camp Lejeune, NC
3 rd Medical Battalion	Marine Corps Combat Development
Okinawa, Japan	Command, Quantico, VA
4 th Medical Battalion	Marine Corps Systems Command
New Orleans, LA	Quantico, VA
1 st Force Service Support Group	Blount Island Command
Camp Pendleton, CA	Jacksonville, FL
2 nd Force Service Support Group	Naval Hospital
Camp Lejeune, NC	Camp Pendleton, CA
1 st Marine Expeditionary Force	Naval Hospital
Camp Pendleton, CA	Camp Lejeune, NC
Division Surgeon's Office	Naval Hospital
Camp Pendleton, CA	Oak Harbor, WA
Marine Force Pacific (MARFORPAC)	Navy Medical Center
Camp Smith, HI	Twentynine Palms, CA
Naval Medical Logistics Command	Navy Medical Center
Ft Detrick, VA	San Diego, CA
Naval Air Station	Naval School of Health Sciences
Lemoore, CA	San Diego, CA

Procedures. A total of 176 surveys, covering 176 of the PCs, were distributed to the SMEs. The 176 PCs were selected from each of the 24 categories of injury type. Many of the PCs were similar clinically and did not vary in terms of the treatment that would be administered at Echelons I and II. For example, PC 001 presents a cerebral contusion with/without a non-depressed linear skull fracture-severe. PC 002 presents a cerebral contusion with/without a non-depressed linear skull fracture-moderately severe. The treatment tasks required to stabilize these two PCs at Echelon I and II do not differ significantly. Because of the high degree of similarity between many of the PCs, survey data could sometimes be applied to more than one PC. Consequently, only one of each group of clinically similar PCs was surveyed thereby permitting the data from the 176 surveyed PCs to be applied to the remaining unsurveyed (clinically similar) PCs.

The surveys served two primary objectives. The first was to have the SMEs examine the tasks associated with each of the PCs. If required, they were to adjust the task profiles for each of the PCs to more closely reflect Marine Corps-level care rendered at the forward echelons. The second primary objective of the surveys was to have the SMEs identify the appropriate

consumable and equipment supply stream required to administer the care for each of the treatment tasks at the forward echelons. A more detailed description of the surveys used to achieve these objectives can be found in Galarneau, Mahoney, Konoske, and Emens-Hesslink (1997) (4). A total of 77 (44%) of the 176 surveys were returned.

Coverage of the PCs from surveys that were not returned was accomplished using SME clinical panels which were formed to review and further refine the data. Participants from the commands listed in Table 1 were again contacted and asked to participate in these panels. Because the panels were formed to closely examine individual areas of Marine Corps field medicine, individuals were selected on the basis of their qualifications and experience in their respective fields. For example, the clinical panel members assembled to refine the task and supply profiles for surgical functions consisted only of surgeons, anesthesiologists, nurse anesthetists, and surgical technicians trained in forward resuscitative surgery.

Projecting Medical Supply Requirements

Medical supply estimates were projected for two AMAL blocks. These were the operating room equipment AMAL 639 and the operating room consumable AMAL 640. Equipment items are those supplies necessary to establish a two-table surgical field and are generally reusable. Items in this category include medical instrumentation necessary to support 2 general surgeons, 1 anesthesiologist, and 7 support staff. A single equipment block is geared to support an operating room for an extended period of time. Consumable items, however, are generally single-use items. As these items are utilized, additional AMAL 640 blocks must be ordered to replenish supplies. Each AMAL 640 block is currently designed to provide resuscitative and stabilizing surgical care for 25 seriously wounded casualties. The AMAL blocks produced in the current study were configured to achieve similar objectives.

Projecting equipment requirements. Obtaining equipment supply estimates for the AMAL 639 required that the clinical requirement for each item be established. This process was accomplished by linking each equipment item considered for inclusion in the AMAL 639 to a known medical task to be conducted in forward resuscitative surgery. Once each item in the proposed AMAL 639 was identified, the amount of each item to be stocked was determined. This was accomplished by matching item quantity with the requirement that the AMAL 639 block support an operating room staff responsible for providing resuscitative surgery to 25 casualties in a two-table operating room setting.

Projecting consumable item requirements. As with the equipment AMAL 639, the clinical requirement for each AMAL 640 consumable item was first identified. This was accomplished by selecting only those consumable items that could be matched to a task known to be conducted in a forward surgical setting. Calculating the amount of each consumable item to stock, however, was accomplished differently than it was with the AMAL 639. Because consumable items are, by definition, patient driven, the amount of each required is highly dependent upon the characteristics of the patient stream. Therefore, advance knowledge of casualty characteristics would allow for the configuration of a supply stream that is uniquely tailored to the number and type of casualties anticipated. In the present study, the PCs expected to be potential forward

resuscitative surgical cases were identified. SMEs created a treatment profile for each of the PCs, which provided the individual operating room tasks and procedures that would be performed for each and then assigned the necessary supplies required to perform the tasks and procedures. Knowledge of the tasks and supplies required to treat each of the surgical PCs provides sufficient data to project a highly tailored supply stream when the number of each anticipated PC is projected.

The Army's patient generating model, PATGEN (U.S. Army Medical Department and School)⁸, was used to obtain the projected number of PCs from which to estimate supply requirements. This model utilizes user-defined input, such as geographical location, battle intensity, troop mix, and rate of buildup to project both the number of anticipated casualties and the distribution of PCs at each echelon of care from Ia through V. To project the appropriate supply mix for the maritime prepositioned force, two separate runs of the PATGEN model were performed. One run produced the PC distribution for Major Regional Contingency (MRC) East and the second for MRC West. Both runs projected the casualty PC profiles for the first 60 days of a worst-case scenario conflict.

Examination of the distribution of surgical PCs from each of the MRCs showed differences in the PC profiles. The differences in the number of surgical PCs expected to present at a forward facility were particularly acute in the category of extremity wounds. To assure that the Maritime Preposition Force war reserve AMALs were adequately configured to support any anticipated contingency, modifications were made in the patient stream before it was loaded into the model. The objective of the modifications was to combine the anticipated casualty rates such that a single patient stream representative of both MRCs resulted. This was accomplished by examining each surgical PC and selecting the rate from the MRC with the highest frequency of occurrence. While this process produced a single patient stream with the critical characteristics of both MRCs represented, the number of casualties loaded into the model was somewhat higher than would be expected to result from an individual MRC.

RESULTS and DISCUSSION

PC Surgical Candidates

To qualify as a potential forward surgical case, PCs were rated on the need for surgery to sustain life or maintain limb viability until evacuated to a definitive facility. Based upon these criteria, SMEs identified 72 of the 350 PCs as candidates for forward resuscitative surgery. These PCs are listed in bold-faced type in Appendix A.

Forward Resuscitative Surgical Procedures

SMEs further created an operating room treatment profile for each of the 72 PCs. An examination of these profiles revealed 14 surgical procedures that would be performed on the 72 PCs to sustain life or limb. These procedures are presented in Table 2.

Table 2 Forward Resuscitative Surgical Procedures

Task #	Procedure
• 455	Amputation through upper arm
• 456	Amputation through forearm
• 457	Amputation through upper leg
• 458	Amputation through lower leg
• Z374	Bowel closure/resection
• 403	Burr hole procedure
• 106	Escharotomy
• 467	Fasciotomy
• 501	Kidney repair
• 372	Liver operation (not resection)
• 508	Nephrectomy
• 488	Neck structure repair
• 373	Splenectomy
• 494	Thoracotomy
• 358	Tracheostomy
• 509	Urinary bladder repair
• Z378	Vascular repair-temporary/Ligation

In addition to the 14 surgical procedures, the operating room treatment profiles revealed 3 anesthesia procedures and 5 non-surgical tasks that would also be performed on the 72 PCs (see Table 3).

Table 3
Non-Surgical Operating Room Procedures

Task#	Procedure
• 530	Induce/Maintain general anesthesia
• 533	Induce/Maintain nerve block
• 535	Induce/Maintain spinal anesthesia
• 537	Recovery/Release from anesthesia
• 351	Operating room team preparation (surgical hand scrub)
• 344	Patient preparation in the operating room
• 354	Operating room cleanup
• ZZ18	Clean/Sterilize instruments

Number of Surgical Cases per AMAL Block

Each current surgical consumable block is configured to treat 25 generic trauma cases. Because the specific surgical procedures to be performed is now known, the proposed AMAL 640 can be stocked to treat only those procedures expected to be required, thereby optimizing the consumable supply mix. To stock the AMAL 640 with supplies necessary to execute only those procedures expected to be performed required first calculating the total number of each surgical procedure from the casualty estimates derived from the combined MRC East and MRC West data. The number of each individual procedure expected was then divided into the total number of procedures in the combined MRC East/West casualty estimates to yield the proportional values listed in the second column of Table 4. To calculate the number of each procedure the proposed AMAL 640 would need to accommodate was determined by dividing the total proportion of each expected procedure into 25 - the minimum number of cases the AMAL 640 must be capable of treating. These data are shown in the third column of Table 4. Because the number of cases of each procedure was rounded up to the next highest whole number, the total number of procedures the proposed 640 could treat is 33. An examination of the effect of this higher number of cases showed that it failed to significantly increase the required number of supplies.

Table 4
Number of Surgical Cases per AMAL Block

	Surgical Procedures	Proportion	Cases
			p/AMAL
•	Vascular repair-temporary/Ligate	20.2%	6
•	Amputation through arm/leg	15.6%	4
•	Bowel closure/resection	14.8%	4
•	Tracheostomy	13.1%	4
•	Thoracotomy	8.9%	3
•	Splenectomy	5.2%	2
•	Neck structure repair	5.0%	2
•	Liver operation (not resection)	4.6%	2
•	Burr hole procedure	4.2%	2
•	Urinary bladder repair	4.0%	1
•	Escharotomy	2.2%	1
•	Kidney repair/Nephrectomy	1.7%	1
•	Fasciotomy	0.5%	1
	Total	100%	33

Once the proportion of each procedure had been determined, the procedures were combined into anatomical categories to determine the overall probability that a particular group of surgical procedures would be performed (see Table 5).

Table 5
Proportion of Resuscitative Surgical Procedures Expected by Anatomical Category

Anatomical Category	Proportion
Abdomen/Pelvis	30.6%
Lower Limb	26.6%
Thoracic	21.9%
Upper Limb	9.6%
Head/Neck	9.1%
Burn - General	2.2%
Total	100%

Operating Room Equipment AMAL 639 Requirements

Assigning the medical supplies to each of the procedures listed in Tables 2 and 3 was the link that established the clinical requirement for each equipment item. Once each of the items required to conduct the procedures was identified, they all were organized into operating room equipment sets. SMEs then determined the minimum number of each set required to equip the operating room. Table 6 shows each of the sets and the number required. Each set and its corresponding items are listed in Appendix B.

Table 6
Operating Room Equipment Sets

	Equipment Set	Num. Req.
Basi	c major set	5
 Orth 	opedic supplement (amputation only)	3
• Neu	rosurgical supplement (burr hole only)	2
• Thor	acic supplement	3
• Gene	eral operating room equipment	2
• Gene	eral anesthesia set	2
 Nerv 	e block anesthesia set	2
• Spin	al anesthesia set	2

Once SMEs identified and linked the equipment items to procedures and determined the appropriate number of sets, the proposed operating room equipment AMAL 639 could be fully configured. Appendix C shows the proposed AMAL 639 listing National Stock Number (NSN), item nomenclature, quantity of item required, item weight, and item cubic volume. Items that were added to upgrade clinical capability are marked with an asterisk.

When the composition of the proposed AMAL 639 had been determined, it was compared to the current Marine Corps AMAL 639. It can be seen from Table 7 that the proposed equipment AMAL 639 contains 54 fewer items. This represents a 23.9% reduction in the number of items. Reductions in the weight and cubic volume were also realized when compared with the current AMAL 639. Table 7 further shows that by establishing the clinical requirement for each item, weight could be reduced 15.0% and the cubic volume by 13.2%.

Table 7
Comparison Between Current and Proposed Operating Room Equipment AMAL 639

	No. of Items	Weight	Cubic Volume
Current 639	226	4081.3 lbs.	360.5 cu.ft.
Proposed 639	172	3467.6 lbs.	312.8 cu.ft.
% Reduction	-23.9 %	-15.0 %	-13.2 %

While significant reductions were realized, no decreases in clinical capability have occurred because the only items removed were those that failed to yield a clinical requirement within the context of the doctrinal mission for forward resuscitative surgery. For example, alveolar clamps, dental impression trays, and root elevators were deleted because no overriding clinical requirement for these items could be identified. Other materiel were removed because of redundancy such as the stand-alone pulse oximeters which duplicated the built-in oximetry capability of the PropaqTM physiological monitors.

Operating Room Consumable AMAL 640 Requirements

As previously discussed, SMEs assigned the items necessary to perform each of the procedures known to be conducted in the operating room. As with the equipment items, this process established the clinical requirement for each item of consumable materiel. The consumables for each of the tasks are presented in Appendix D. This process provided the list of consumable AMAL 640 items that would be both stocked in the proposed AMAL 640 and loaded into the model to determine the quantity of each to stock. It should be noted that one additional set of consumable items is listed on the first page of Appendix D. This is the basic operating room consumable setup. Since the basic set-up is used for all procedures except eschartomies, fasciotomies, and tracheostomies, it was listed as its own set of materiel. The procedures that require the basic setup are identified in Appendix D. Furthermore, the particular equipment sets required for each of the procedures are also shown in Appendix D.

Determining the quantity of each consumable item to stock was conducted using the expected number of each of the forward surgical procedures the AMAL 640 must be equipped to perform. Obtaining final consumable quantities was accomplished by multiplying the amount of each consumable required by the number of times the procedure requiring the consumable was anticipated to be performed. For example, SMEs assigned one 55-unit multi-fire titanium 3.5mm

wide disposable staple gun to both the bowel wound closure/resection procedure and the thoracotomy procedure. The AMAL 640 must be stocked to perform 4 bowel procedures and 3 thoracotomies (Table 4), resulting in a total required quantity of 7 of this type of stapler. These staplers come 3 to a package. Therefore, the final number of packages that will be stocked in the AMAL 640 is 3.

Once SMEs had identified and linked the consumable items to the procedures, the proposed operating room equipment AMAL 640 could be fully configured. Appendix E shows the proposed AMAL 640 listing NSN, item nomenclature, quantity of item required, item weight and item cubic volume. Items that were added to upgrade clinical capability are marked with an asterisk.

When the composition of the proposed AMAL 640 had been determined, it was compared to the current Marine Corps AMAL 640. It can be seen from Table 8 that the proposed consumable AMAL 640 contains 71 fewer items. This represents a 28.5% reduction in the number of items. Reductions in the weight and cubic volume were also realized when compared with the current AMAL 640. Table 8 further shows that by establishing the clinical requirement for each item, weight could be reduced 22.4% and the cubic volume by 36.3%.

Table 8
Comparison Between Current and Proposed Operating Room Consumable AMAL 640

	No. of Items	Weight	Cubic Volume
Current 640	249	1668.9 lbs	113.1 cu.ft.
Proposed 640	178	1295.8 lbs	72.1 cu. ft.
% Reduction	-28.5 %	-22.4 %	-36.3 %

While significant reductions in the number of items, weight and volume were realized, the clinical capability of the consumable AMAL 640 was not decreased. Items deleted were limited to those that had no clinical requirement within the context of the forward surgical mission or that were redundant. For example, tubular finger gauze and dental impression powder were deleted because no clinical requirement could be found to justify their inclusion at this level of care. Redundancy within the block was also eliminated. For example, one of the two types of size 16 FR foley catheters was deleted from the AMAL 640. Still, other items were deleted because the equipment that used them had been deleted in previous AMAL reviews such as the packages of the thoracic/abdominal staples that could not be used because the stainless steel staplers were no longer in the equipment AMAL. In other areas, clinical capability was increased by the addition of items not currently stocked. For example, the heavy plaster casting bandages were replaced with lightweight, fast-acting polymer splinting material.

CONCLUSIONS

It was demonstrated that significant reductions in the logistical burden carried by Marine Corps forces can be achieved by modeling the clinically relevant elements of the theater of operations. Developing clinical profiles and assigning supplies to achieve a desired level of care as defined by mission, policy, and doctrine allows medical support to be more scenario-based and more capable of rapid and efficient delivery. As policy and doctrine continue to evolve, the model presented in this paper can be modified as needed to project medical supply requirements for the continually changing scope of the forward medical mission.

The process of establishing the clinical requirement for each supply item produced an audit trail, giving logisticians and medical planners an objective management tool for maintaining and upgrading AMAL medical materiel. Historically, periodic reviews were conducted to specify the materiel stocked in the AMALs. This process required SMEs to develop materiel estimates based on what they perceived to be the needs of a specific number of generic patients. Consequently, supply estimates reflected a subjective interpretation of need and a tendency to address past scenarios rather than future operations. By providing an audit trail for each item, the supply requirements are clearly linked to the medical task requiring them. As the mission changes, along with changes in medical technology, items may be added or deleted from the AMALs with greater assurance that the materiel will meet projected operational requirements.

The reductions realized in the operating room equipment AMAL 639, while significant in terms of weight and cube, were constrained by certain factors. In terms of item quantity, the surgical instruments, which consist of such items as the forceps, scissors, retractors, and probes, represent the overwhelming majority of items. They, however, represent a relatively minor portion of total weight and cube. The largest share of weight and cube is attributable to only 3 of the AMAL 639's 226 individual items. These items are the autoclave sterilizers, the surgical tables, and the field surgical lights. When compared to the total capacity of the AMAL 639, they account for more than one half of the weight and cube. To achieve further reductions in this AMAL, it is recommended that these items be replaced with those that are lighter and more efficiently packaged. To ensure that appropriate replacements are selected during this period of changing policy and doctrine, this process should be approached by first drafting a mission needs statement and developing service-specific operational requirements.

REFERENCES

- 1. Operational Maneuver from the Sea: A Concept for Projection of Naval Power Ashore. Headquarters Marine Washington, DC, 1996.
- 2. Medical Readiness Strategic Plan 1995-2001. Department of Defense, Washington,
- 3. Forward Resuscitative Surgery Seminar. Joint Chiefs of Staff, Medical Readiness Division and Commandants Warfighting Laboratory, United States Marine Corps. January, 1997.
- 4. Galarneau, M. R., Mahoney, K. J., Konoske, P.J., & Emens-Hesslink, K. E. (1997). Development of a Model for Predicting Medical Supply Requirements at the Forward Echelons of Care: Preliminary Findings for Echelon II Laboratory and X-ray Ancillaries, Naval Health Research Center, Report No. 97-3, San Diego, CA.
- 5. Galarneau, M.R., Konoske, P.J., Emens-Hesslink, K.E., & Gauker, E.D. (1997). A Model for Predicting Medical Supply Requirements at the Forward Areas of Care: Battalion Aid Stations, Naval Health Research Center, Report No. 97-28, San Diego, CA
- 6. Defense Medical Standardization Board (1996). DEPMEDS Policy Guidelines and Treatment Briefs (draft): Fort Detrick, MA
- 7. Galarza, J. G. MAJ (1987). Using the Deployable Medical Systems Clinical Database for Materiel Requirements. Presented at the Army Operations Research Symposium, Fort Lee, VA
- 8. Patient Workload Generator (PATGEN). U.S. Army Medical Department and School, Directorate of Combat and Doctrine Development, Fort Sam Houston, TX.

PC DESCRIPTION

PC#

obstruction.	
Wound face jaws and neck open lacerated with associated fractures excluding spinal fractures severe - with airway	017
	016
	015
Wound scalp open without cerebral injury or skull fracture moderate - scalp laceration.	014
	013
,	012
Intracranial hemorrhage spontaneous nontraumatic all cases.	011
Cerebral contusion with open skull fracture moderate - without intracranial fragments and/or depressed skull fracture.	010
eyeball laceration with retained intraocular foreign body.	
Cerebral contusion with open skull fracture severe - with intracranial fragments and/or depressed skull fracture; eyelid and	600
depression.	
Cerebral contusion closed with depressed skull fracture moderate - no associated hematoma or significant effect from	800
massive depression.	
Cerebral contusion closed with depressed skull fracture severe - with associated intracerebral hematoma and/or	004
with/without focal neurological deficit.	
	900
hematoma (including epidural hematoma) with rapidly deteriorating comatose patient.	
Cerebral contusion closed with intracranial hematoma with/without nondepressed linear skull fracture - severe - large	005
hours without focal neurological deficit.	
Cerebral contusion closed with/without nondepressed linear skull fracture moderate - loss of consciousness from 12 to 24	004
with focal neurological deficit.	
Cerebral contusion closed with/without nondepressed linear skull fracture severe - loss of consciousness greater than 24 hours	003
Cerebral concussion closed with/without nondepressed linear skull fracture moderate - loss of consciousness less than 2 hours.	002
Cerebral concussion closed with/without nondepressed linear skull fracture severe - loss of consciousness from 2 to 12 hours.	001

PC#

018

019

020

022

021

025 026

024

028 029

027

032

033 034 036

030 031

Eye wound lacerated moderate - without retinal detachment or retinal injury no foreign body retained without loss of vitreous Wound face jaws and neck open lacerated with associated fractures excluding spinal fractures moderate - without airway Wound face and neck open lacerated contused without fractures severe - with airway obstructions and/or major vessel Wound face and neck open lacerated contused without fractures moderate - without airway obstruction or major vessel 3ye wound severe - loss of intraocular fluid with/without retinal detachment, with severe lid laceration, eye not salvageable Burn thermal partial thickness head and neck greater than 5% but less than 10% of total body area and/or eye involvement. 3urn thermal superficial head and neck greater than 5% but less than 10% of total body area and/or eye involvement. (Potential forward resuscitative surgical candidates are listed in bold-faced type) Burn thermal partial thickness head and neck less than 5% of total body area and no eye involvement. Burn thermal superficial head and neck less than 5% of total body area and no eye involvement. intervertebral disc disorders with nerve root compression responding to bed rest/traction intervertebral disc disorders with nerve root compression resistant to bed rest/traction. Fracture spine closed with cord damage cervical spine with respiratory involvement. Fracture spine open with cord damage cervical spine with respiratory involvement. obstruction; eyelid and eyeball laceration with retained intraocular foreign body. Fracture spine closed with cord damage below cervical spine (progressive) Fracture spine open with cord damage below cervical spine (progressive). Strains and sprains sacroiliac region severe - nonambulatory. Strains and sprains sacroiliac region moderate - ambulatory. Fracture spine closed without cord damage unstable lesion. Fracture spine closed without cord damage stable lesion. fluid patient has hyphema eye salvageable. Hearing impairment moderate. Hearing impairment severe. PC DESCRIPTION nvolvement.

Wound forearm open lacerated penetrating without bone nerve or vascular injury with major loss of muscle tissue severe Wound hand and/or fingers open lacerated without fractures moderate - no tendon involvement or limited to sublimis tendon Wound forearm open lacerated penetrating with fracture and with nerve and vascular injury forearm not salvageable. Wound forearm open lacerated penetrating without bone nerve or vascular injury moderate - not requiring major debridement. Wound forearm open lacerated penetrating with fracture and with nerve and vascular injury forearm salvageable. Wound hand open lacerated contused crushed with fracture(s) all cases - involving fractures of carpals and/or metacarpals. Burn thermal full thickness head and neck greater than 5% but less than 10% of total body area with eye involvement. Wound upper arm open penetrating lacerated without fracture severe - with nerve and/or vascular injury. Wound hand and/or fingers open lacerated without fractures severe - superficial and deep tendon involvement. Wound upper arm open penetrating lacerated without fracture moderate - without nerve or vascular injury (Potential forward resuscitative surgical candidates are listed in bold-faced type) Wound fingers open lacerated contused crushed with fracture(s) of phalangeals requiring rehabilitation. Burn thermal full thickness head and neck less than 5% of total body area and no eye involvement. Wound upper arm open with fractures and nerve and vascular injury arm nonsalvageable. Wound upper arm open with fractures and nerve injury no vascular injury arm salvageable. Wound shoulder girdle open with bone injury moderate - no joint involvement. Fracture hand and/or fingers closed moderate - not requiring closed reduction. Wound shoulder girdle open with bone injury severe - joint involvement. Fracture hand or fingers closed severe - requiring closed reduction. Crush injury upper extremity severe - limb not salvageable. Fracture radius and ulna closed moderate - colles fracture. Fracture radius and ulna closed severe - shafts of bones. Fracture humerus closed upper shaft all cases. Fracture clavicle closed all cases. requiring major debridement. PC DESCRIPTION PC# 044 045 046 048 049 042 043 047 050 055 950 054 057

njury lung closed (blast crush) with pneumohemothorax severe - one lung with pulmonary contusion and acute severe Injury lung closed (blast crush) with pneumohemothorax moderate - one lung with pulmonary contusion and respiratory Burn thermal full thickness upper extremities greater than 10% but less than 20% of total body area involved. Burn thermal partial thickness upper extremities greater than 10% but less than 20% of total body area involved. Burn thermal superficial upper extremities greater than 10% but less than 20% of total body area involved. (Potential forward resuscitative surgical candidates are listed in bold-faced type) Burn thermal partial thickness upper extremity less than 10% of total body area involved. 3urn thermal full thickness upper extremity less than 10% of total body area involved 3um thermal superficial upper extremity less than 10% of total body area involved. Crush injury upper extremity moderate - limb salvageable. Sprain fingers closed acute moderate - no thumb involvement. Amputation forearm traumatic complete all cases. Amputation full arm traumatic complete all cases. Dislocation/fracture elbow closed acute all cases. Fracture ribs closed severe - multiple fractures. Amputation hand traumatic complete all cases. Dislocation hand or wrist closed acute. Dislocation shoulder closed all cases. Sprain wrist closed acute all cases. Sprain thumb closed acute severe. Dislocation fingers closed acute. Fracture rib(s) closed moderate. PC DESCRIPTION espiratory distress. Not assigned. Not assigned. PC# 9/0 870 079 084 890 690 070 072 073 074 075 077 082 083 990 990 **L**90 071 081 062 063 064

PC#	PC DESCRIPTION
985	Wound thorax (anterior or posterior) open superficial lacerated contused abraded avulsed requiring major debridement.
086	Wound thorax (anterior or posterior) open superficial lacerated contused abraded avulsed not requiring major debridement.
/ 00	would include a faircriot of posterior) open penetrating with associated the fractures and predimensional acute severe respiratory distress.
880	Wound thorax (anterior or posterior) open penetrating with associated rib fractures and pneumohemothorax moderate
	respiratory distress.
680	Not assigned.
060	Burn thermal superficial trunk greater than 20% but less than 30% of total body area involved.
091	Burn thermal superficial trunk greater than 10% but less than 20% of total body area involved.
092	Burn thermal partial thickness trunk greater than 20% but less than 30% of total body area involved.
093	Burn thermal partial thickness trunk greater than 10% but less than 20% of total body area involved.
094	Burn thermal full thickness trunk greater than 20% but less than 30% of total body area involved.
960	Burn thermal full thickness trunk greater than 10% but less than 20% of total body area involved.
960	Wound abdominal wall (anterior or posterior) lacerated abraded contused avulsed without entering abdominal cavity severe -
	requiring major debridement.
260	Wound abdominal wall (anterior or posterior) lacerated abraded contused avulsed without entering abdominal cavity not
	requiring major debridement.
860	Wound liver closed acute (crush fracture) major liver damage.
660	Wound liver closed acute (crush fracture) minor liver damage.
100	Wound spleen closed acute (crush fracture) all cases.
101	Wound abdominal cavity open with lacerating penetrating perforating wound to the large bowel.
102	Wound abdominal cavity open with lacerating penetrating perforating wound to the small bowel without major or
	multiple resections.
103	Wound abdominal cavity open with penetrating perforating wound of liver major damage.
104	Wound abdominal cavity open with penetrating perforating abdominal wound with lacerated liver.

	Appendix A - DEFMEDS Fatient Condition List (Potential forward resuscitative surgical candidates are listed in bold-faced type)
PC#	PC DESCRIPTION
105 106	Wound abdominal cavity open with penetrating perforating wound of spleen. Wound abdominal cavity open with lacerated penetrated perforated wound with shattered kidney.
107	Wound abdominal cavity open with lacerated penetrating perforating wound with lacerated kidney initially repaired but subsequent nephrectomy.
108	Wound penetration of pelvis with severe organ damage.
109	Wound penetration of pelvis with moderate organ damage.
110	Wound buttocks severe - open lacerated penetrating perforating and avulsed.
1111	Wound buttocks moderate - open lacerated contused and abraded.
112	Displaced fracture of pelvis closed with associated soft tissue damage and pelvic organ damage.
113	Nondisplaced fracture of pelvis closed with associated soft tissue damage.
114	Wound abdomen open with pelvic fracture and penetrating perforating wounds to multiple pelvic structures (male or
	female).
115	Wound abdomen open with pelvic fracture and penetrating perforating wounds to pelvic colon only (male or female).
116	Wound external genitalia male severe - lacerated avulsed crushed.
117	Wound external genitalia male moderate - abraded and contused.
118	Wound external genitalia female severe - lacerated avulsed crushed.
119	Wound external genitalia female moderate - abraded contused.
120	Fracture closed femur shaft all cases.
121	Wound thigh open without fracture nerve or vascular injury requiring major debridement.
122	Wound thigh open without fracture nerve or vascular injury not requiring major debridement.
123	Wound thigh open lacerated penetrating perforating with fracture and nerve/vascular injury limb not salvageable.
124	Wound thigh open lacerated penetrating perforating with fracture and nerve and/or vascular injury limb salvageable.
125	Wound knee open lacerated penetrating perforating with joint space penetration shattered knee.
126	Wound knee open lacerated penetrating perforating with joint space penetration articular cartilage damage no bone injury.
127	Fracture closed tibia and fibula shaft all cases.

Wound lower leg open lacerated penetrating perforating with fracture and nerve and/or vascular injury limb Wound lower leg open lacerated penetrating perforating with fracture and nerve/vascular injury limb not salvageable. Wound ankle foot toes open penetrating perforating with fractures and nerve and/or vascular injury limb salvageable. Wound ankle foot toes open penetrating perforating with fractures and nerve/vascular injury limb not salvageable. Burn thermal superficial lower extremities and genitalia greater than 30% but less than 40% of total body area involved. Burn thermal superficial lower extremity and genitalia greater than 15% but less than 30% of total body area involved. Wound lower leg open lacerated penetrating perforating without fractures not requiring major debridement. Wound lower leg open lacerated penetrating perforating without fractures requiring major debridement. (Potential forward resuscitative surgical candidates are listed in bold-faced type) Wound ankle foot toes open lacerated contused without fractures but requiring major debridement. Wound ankle foot toes open lacerated contused without fractures not requiring major debridement. Amputation traumatic complete requiring hip disarticulation. Fracture ankle/foot closed nondisplaced not requiring reduction. Sprain ankle closed acute grade 2 incomplete ligament rupture. Sprain ankle closed acute with complete ligament rupture. Fracture ankle/foot closed displaced requiring reduction. Amputation below knee traumatic complete all cases. Crush injury lower extremity limb not salvageable. Crush injury lower extremity limb salvageable. Amputation foot traumatic complete all cases. Amputation above knee traumatic complete. Fear ligaments knee acute incomplete rupture. Tear ligaments knee acute complete rupture. Dislocation toes closed acute all cases. Dislocation hip closed acute all cases. PC DESCRIPTION salvageable. PC# 138 139 140 142 144 130 137 141 131

Appendix A - DEPMEDS Patient Condition List Forward Resuscitative Surgical Candidates are Listed in Bold-faced Type

PC DESCRIPTION

PC#

Burn thermal full thickness lower extremities and genitalia greater than 30% but less than 40% of total body area Burn thermal full thickness lower extremity and genitalia greater than 15% but less than 30% of total body area Burn thermal partial thickness lower extremities and genitalia greater than 30% but less than 40% of total body area involved. Burn thermal partial thickness lower extremity and genitalia greater than 15% but less than 30% of total body area involved. MIW chest with pneumohemothorax and abdomen with penetrating perforating wound kidney bladder. Multiple Injury Wound (MIW) brain and chest with sucking chest wound and pneumohemothorax. MIW chest with pneumohemothorax and abdomen with penetrating perforating wound spleen. nsect bites and stings (unspecified body area) with systemic symptoms and/or respiratory difficulty. MIW chest with pneumohemothorax and abdomen with penetrating perforating wound liver. MIW chest with pneumohemothorax and abdomen with perforating wound bladder. MIW chest with pneumohemothorax and abdomen with penetrating wound colon. MIW chest with pneumohemothorax and limbs with fracture and vascular injury MIW brain and abdomen with shock and penetrating perforating wound spleen. MIW brain and abdomen with shock and penetrating perforating wound liver. MIW abdomen with penetrating perforating wound of colon and bladder. MIW brain and lower limbs requiring bilateral above knee amputations. MIW abdomen with penetrating perforating wound of colon and spleen. MIW brain and abdomen with penetrating perforating wound bladder. MIW brain and abdomen with penetrating perforating wound kidney. MIW abdomen with penetrating perforating wound of colon and liver. MIW brain and abdomen with penetrating perforating wound colon. Bites and stings (unspecified body area) moderate localized symptoms. Blisters hand fingers foot toes due to friction acute moderate all cases. 155 159 165 152 153 154 160 162 163 164 166 167 168 169 161 171

PC DESCRIPTION

PC#

MIW abdomen and limbs with penetrating perforating wound of colon and open fracture and neurovascular injury of MIW abdomen and lower limbs with fracture and nerve injury with penetrating wound of spleen with full thickness MIW abdomen pelvis limbs with fracture and neurovascular injury limb salvageable and penetrating wound kidney. MIW abdomen pelvis limbs without fracture or neurovascular injury and penetrating perforating wound bladder. MIW chest with pneumohemothorax soft tissue injury to upper limbs and abdomen with wound of colon. MIW chest with pneumohemothorax soft tissue injury to upper limbs and penetrating wound of brain. MIW chest with pneumohemothorax pelvis and abdomen with wound of colon and bladder. MIW abdomen and limbs without fracture or nerve injury with penetrating wound of liver. MIW abdomen and pelvis with penetrating perforating wounds of spleen and bladder. MIW abdomen and pelvis with penetrating perforating wound of liver and kidney. Multiple nonperforating fragment wounds of skin and soft tissue. French foot immersion foot moderate - no vesicle formation. MIW abdomen and chest with multiple organ damage. Appendicitis acute without perforation rupture peritonitis. Trench foot immersion foot severe - vesicle formation. Appendicitis acute with perforation rupture peritonitis. Frostbite full skin thickness or deeper involvement. burns to greater than 20% of TBSA. Frostbite less than full skin thickness. salvageable lower limb. Hypothermia all cases. Heat cramps all cases. Heat exhaustion. Not assigned. Heat stroke. 175 179 185 186 188 681 184 187 190 192 191

(Potential forward resuscitative surgical candidates are listed in bold-faced type) inguinal hernia uncomplicated direct or indirect no sliding no incarceration of bowel or bladder. Eczema dermatitis seborrheic contact others affecting weight bearing or pressure areas. Appendix A - DEPMEDS Patient Condition List nternal derangement of knee chronic with torn meniscus and/or ligament laxity, ngrown toenails bilateral with secondary infections unresolvable at Echelon II. Eczema dermatitis seborrheic contact others not affecting weight bearing areas. nguinal hernia complicated direct or indirect sliding incarceration of bowel. Herpes simplex and zoster without encephalitis all types all cases. Strain lumbosacral sacroiliac joint chronic all cases. Jellulitis involving face or weight bearing areas. Cellulitis other than face or weight bearing areas. Pilonidal cyst/abscess requiring major excision. Pilonidal cyst/abscess requiring minor incision. ngrown toenails without secondary infection. 30ils furuncles pyoderma requiring surgery 30ils furuncles pyoderma all other cases. Dermatophytosis severe - affecting feet. Conjunctivitis moderate all cases. Dermatophytosis all other cases. Conjunctivitis severe all cases. PC DESCRIPTION Hyperhidrosis all cases. Pediculosis all cases. 3lepharitis all cases. Scabies all cases. Not assigned. Not assigned.

PC#

199 200

202 203 204

201

205 206

207 208

209 210 212 213 214 215 215

211

218 219

217

(Potential forward resuscitative surgical candidates are listed in bold-faced type)

Appendix A - DEPMEDS Patient Condition List

PC DESCRIPTION PC#

Corneal ulcer.

Corneal abrasion.

ridocyclitis acute marked visual impairment.

ridocyclitis acute minimal visual impairment.

Refraction and accommodation disorders refraction required.

Refraction and accommodation disorders replacement of spectacles required. 226 227 228 229 230 231

Otitis externa all cases.

Otitis media acute suppurative all cases.

Not assigned.

Allergic rhinitis all cases. 232

Upper respiratory infections acute including tonsillitis all cases. 233

Bronchitis acute all cases. 234

Asthma with disabling symptoms or repeated attacks. 235

Asthma other cases. 236

Not assigned. 237

Not assigned. 238

Acute respiratory disease severe. 239

Acute respiratory disease moderate. 240

Not assigned. 241

Not assigned. 242

Food poisoning all organisms disabling symptoms. 243

Food poisoning all organisms moderate symptoms. 244

Diarrheal disease severe. 245 Diarrheal disease moderate.

Upper gastrointestinal hemorrhage gastritis or ulcer.

White phosphorus burns resultant partial thickness burns < 40% TBSA all cases. Foxic inhalation including burn-related respiratory injuries severe all cases. Near drowning without cervical spine injury or hypothermia all cases. Sexually transmitted diseases (STD) genital ulcers and/or adenopathy. Regional ileitis disabling symptoms unresponsive to treatment. Peptic ulcer gastric or duodenal penetrating and/or perforating. Sexually transmitted diseases (STD) complicated. Peptic ulcer gastric or duodenal uncomplicated. Sexually transmitted diseases (STD) urethritis. Tenosynovitis elbow wrist shoulders etc. Regional ileitis responds to treatment. Meningoencephalitis uncomplicated. Meningoencephalitis complicated. Phlebitis deep vein involvement. Hemorrhoidal disease all cases. PC DESCRIPTION Dyspepsia acute all cases. Glomerulonephritis acute. Helminthiasis all cases. schemic heart disease. Severe hypertension. Migraine all cases. Not assigned. Not assigned. Not assigned. Not assigned. PC#

255 256

252 253 254

250

251

249

258 259 260

257

264 265 266

262 263

261

268 269

267

Glomerulonephritis chronic.

PC DESCRIPTION

PC#

Pyelonephritis acute secondary to obstruction.

Pyelonephritis acute no obstruction. 274 275

Nephrotic syndrome all cases. 276

Ureteral calculus causing obstruction impacted.

Ureteral calculus not causing obstruction.

Epididymitis cystitis prostatitis acute all cases.

Not assigned.

Infectious mononucleosis all cases.

Hepatitis infectious viral all cases.

283

Not assigned. 284

Cholecystitis acute with stones all cases. 285 286 287

Pancreatitis acute all cases.

Cirrhosis all cases.

Not assigned.

Neoplasms malignant. 288 289

Neoplasms benign. 290

Abnormal uterine bleeding. 291

Dysmenorrhea amenorrhea. 292

Pelvic inflammatory disease (PID) all cases. 293

Cervicitis endocervicitis with symptomatic leukorrhea. 294

Vulvovaginitis. 295

Not assigned.

Fubal pregnancy all cases.

Wound abdominal cavity open with lacerated penetrating perforating wound kidney moderate - kidney salvageable. Fracture mandible with/without oral laceration without airway involvement unstable severe requiring open reduction. Wound knee open lacerated penetrating perforating with joint space penetration no bone or articular cartilage. Wound fingers open lacerated contused crushed with fracture(s) of phalangeals not requiring rehabilitation. (Potential forward resuscitative surgical candidates are listed in bold-faced type) Dislocation/subluxation temporomandibular joint without fracture chronic requiring correction. Dislocation/subluxation temporomandibular joint without fracture acute initial injury. Eye wound lacerated penetrated with retinal injury eye salvageable. Orug misuse (other than alcohol) severe - atypical no dependency. Alcohol dependency severe - impending or actual DTs. Stress reaction severe unstable delayed improvement. Orug misuse (other than alcohol) mild or moderate. Stress reaction severe unstable slow improvement. Stress reaction severe stable slow improvement. Drug dependency (other than alcohol) severe. Stress reaction severe - rapid improvement. Alcohol dependency syndrome moderate. Stress reaction severe unstable persisting. Abortion spontaneous with hemorrhage. Alcohol misuse simple intoxication. Non-psychotic mental disorders. Stress reaction mild/moderate. PC DESCRIPTION Conduct disorders. Not assigned. Not assigned. esychosis. PC# 299 306 308 309 310 315 316 300 302 303 304 305 307 312 313 314 318 301 311 317

PC DESCRIPTION PC#

Fracture mandible with/without oral laceration without airway involvement mild displacement stable.

Stress reaction severe stable - delayed improvement.

Stress reaction severe stable persisting. 325

Not assigned. Not assigned. 326 327

Animal bites and rabies exposure. 328

Trachoma all cases. 329

Schistosomiasis all cases. 330

Malaria severe - all species. 331

Malaria moderate - all species. 332

Febrile illness acute severe - except malaria and pneumonia. 333

Febrile illness acute moderate. 334

Snake bite. 335

Not assigned. 336

Not assigned. 337

Not assigned. 338

Cutaneous ulcers including leishmaniasis. 339

Not assigned. 340

Not assigned. 341

Not assigned. 342

Not assigned. 343

Not assigned. 344

Not assigned. 345

Eye wound directed energy induced (laser) severe of macula and/or optic nerve with vitreous blood severe visual loss one or

both eyes.

PC# PC DESCRIPTION

- Eye wound directed energy induced (laser/rfr) moderate to severe posterior nonmacular nonoptic nerve visual loss secondary to vitreous blood. 347
- Eye wound directed energy induced (laser) moderate nonmacular nonoptic nerve no vitreous blood. 348
- Eye wound directed energy induced (laser/rfr) mild to moderate anterior pain with photophobia and disruption of corneal 349
- Eye wound directed energy induced (laser) mild flash blindness no permanent damage. 350

Appendix B Operating Room Equipment Sets

Basic Major Set

NSN	Nomenclature	Quantity	NM
6515003866600	Cannula Abdominal Poole 23Fr 8.75" Fenestrated Curved	+	EA
6515003866800	Cannula Brain Frazier 8Fr 7.5" Open End Tip CRS	1	EA
6515003867600	Cannula Laryngeal Angular Yankauer Perf 9".		EA
6515006903212	Clamp Artery Debakey-Bahson Crvd & Serr 65mm Jaw	2	EA
6515006903215	Clamp Artery Glover 9CM Serr Str 40mm Jaw		EA
6515006903216	Clamp Artery Glover 9CM Crvd Serr 40mm Jaw		EA
6515008901682	Clamp Artery Glover Bulldog 6.5Cm Crvd Serr 27mm	-	EA
6515008901683	Clamp Vena Cava Satinsky Serr Ratch-Pawl 10" Large	2	EA
6515003333700	Forceps Dressing 10" Str & Serr Rd Tip Heavy		EA
6515003333100	Forceps Dressing Cushing 7" Str & Serr Rd Tip		EA
6515003341400	Forceps Gall Duct Lahey Crvd 7.5" CRS Box Lock Joint	2	EA
6515003373900	Forceps Gauze Pad Holding Foerster 9-9.75" Str	4	EA
6515003347500	Forceps Hemo Rochester-Ochsner Str 7.25"	2	EA
6515003382900	Forceps Hemo Schmidt 7.25" Crvd Serr Jaw Tonsil	4	EA
6515003345600	Forceps Hemo Halsted Mosquito Pt 5" Str	4	EA
6515000653181	Forceps Hemo Mixter Half-Crvd 6.87-7.5"	2	EA
6515003347400	Forceps Hemo Rochester-Ochsner 1.5-1.75" Str Jaw	2	EA
6515003344900	Forceps Hemo Halsted Mosquito Pt 4.75-5.25"	4	EA
6515003343800	Forceps Hemo Kelly 5.25-5.75" Slightly Curved	10	EA
6515003346800	Forceps Hemo Kelly 5.5" Str Jaw Box	2	EA
6515003344100	Forceps Hemo Mayo-Carmalt 7.75-8.25" O/A Lg CRS	2	EA
6515003349500	Forceps Hemo Pean Slightly Crvd Jaw 9"	2	EA
6515003344300	Forceps Hemo Rochester-Pean 6-6.5"	4	EA
6515010489066	Forceps Hemo Storz-Storey Rt Angle 8.75" 52mm	2	EA
6515011398167	Forceps Intestinal Angular Glassman Noncrushing 9"	2	EA
6515003352900	Forceps Intestinal Babcock 7.75" Str Box Lock	4	EA
6515003351900	Forceps Intestinal Doyen 8.75" Box Lock Joint CRS	2	EA

Appendix B Operating Room Equipment Sets

Basic Major Set (cont.)

6515003353200	Forceps Intestinal Doyen Str 8.75-9.25" CRS	2	EA
6515012983893	Forceps Intestinal Rt Angle 9.25" Nondetachable	2	EA
6515003355800	Forceps Kidney Pedicle Guyon-Pean 9.25-9.5" Box	-	EA
6515003377800	Forceps Tissue Adson 4.5" Tweezer Str & Smooth Jaw	2	EA
6515003380300	Forceps Tissue Allis 6" Pivoted Str & Smooth Jaw CRS	4	EA
6515006903208	Forceps Tissue Debakey 7.75" Tweezer Str & Serr	4	EA
6515006903209	Forceps Tissue Debakey 9.5" Tweezer Str & Serr	2	EA
6515012983857	Forceps Tissue Ferris-Smith Tweezer 7" w/1x2 Teeth	2	EA
6515003204600	Forceps Towel Backhaus 5.25" Opposed Prongs	4	EA
6515011417469	Handle Surg Knife Detach Blade Sz 3L	1	EA
6515003447800	Handle Surg Knife Detach Blade Sz 3	2	EA
6515005843736	Holder Suture Needle Brown 5.25" Serr Jaws	2	EA
6515003417200	Holder Suture Needle Collier 5" Str Jaw Box Lock	2	EA
6515006903198	Holder Suture Needle Debakey 7" Serr Str	2	EA
6515006903200	Holder Suture Needle Debakey 9" Serr Str	2	EA
6515002998737	Holder Suture Needle Hegar-Mayo 7" Serr Tungsten	2	EA
6515003423100	Hook Iris Tyrell 5" Steel 2/3 Circle Blunt Tip CRS	4	EA
6515011190018	Probe Gen Op Bulbous Tip 5" CRS	1	EA
6515011190787	Probe Gen Op Bulbous Tip 10" CRS	1	EA
6515003604910	Retractor Abdominal Balford (Balfour) Large 6-Blade		EA
6515011398969	Retractor Abdominal Balfour/Codman-Shurtleff 2.5x3.25"	1	EA
6515003603490	Retractor Abdominal Deaver 1" Blade 12" Single End		EA
6515003603510	Retractor Abdominal Deaver 1.5" Blade 12" Single End		EA
6515003603530	Retractor Abdominal Deaver Single End 12x2"		EA
6515011398195	Retractor Abdominal Kelly 11.5" 3x3.5" Serr Tongue		EA
6515011398407	Retractor Abdominal Richardson 9 1/8" Blade	2	EA
6515011398196	Retractor Gen Op Harrington 13x2.25" Crvd Right	1	EA
6515003610350	Retractor Gen Op Volkman 8.5" 4 Blunt Prongs	2	EA
6515009269193	Retractor Mastoid Weitlaner 6.5" Hook Unit 3 vs 4	2	EA

Appendix B Operating Room Equipment Sets

Basic Major Set (cont.)

6515003614850	Retractor Perineal Gelpi CRS Hook Unit 6.5"	2	EA
6515012080578	Retractor Ribbon Flexsteel 13x13"	1	EA
6515003603850	Retractor Set Abdominal Richardson-Eastman CRS	1	SE
6515003609200	Retractor Set Gen Op Rigid Double End	-	SE
6515003618980	Retractor Tracheal Hupp CRS Sharp Blade Pt 3-Prong	2	EA
6515011398197	Retractor Vagotomy Weinberg 4x6.75"	1	EA
6515003620200	Retractor Vein Cushing 8.5" CRS	2	EA
6515003651820	Scissors Gen Surg 5.5" One Blunt & One Sharp Blade	2	EA
6515010895668	Scissors Gen Surg Metzenbaum Delicate Dissecting 11"		EA
6515006903223	Scissors Gen Surg Potts Smith 7.5" Ang to Handle	_	EA
6515003640500	Scissors Gen Surg Mayo 5.25-5.75" Crvd Blade	-	EA
6515003640520	Scissors Gen Surg Mayo 6.5-7" Crvd Blade Blunt Pts	1	EA
6515003640920	Scissors Gen Surg Mayo 6.5-7" Str Blade Blunt Pts	1	EA
6515003656200	Scissors Tenotomy Stevens 4-4.5" Crvd Blade	-	EA
6515003657100	Scissors Tonsil Metzenbaum 7" Crvd Blade Blunt Pt	2	EA
6515011511822	Scissors Wire Cutting Surg 4.75" Short Ang to Side Jaw	1	EA
6515011397550	Speculum Rectal Pratt 8.5" 3.5x1.75" Blade Setscrew	_	EA
6530007940300	Tray Instrument Rectangle 20.6x12.6x4" CRS Sz 5	_	EA
6530007940000	Tray Instrument Rectangle 15.5x9.5x2" Tyll Sz 3		EA

Orthopedic Supplement

NSN	Nomenclature	Quantity	UM
6515003225550	Curette Mastoid Spratt Sz 2 Spoon Shape Blade		EA
6515003225600	Curette Mastoid Spratt Sz 3 Spoon Shape Blade		EA
6515003225700	Curette Mastoid Spratt Sz 5 Spoon Shape Blade	-	EA
6515003234380	Cutter Bone Pin 18" (Steinman Pins/Wire) Crvd Comp	1	EA
6515003123500	Drill Hand Bone Smedberg Dsgn Jacobs Chuck Dsgn		EA
6515012460182	Drill Twist Bone Triangular 3"	2	EA
6515003280700	Elevator Periosteal 7.75" Crvd Blade Sharp		EA
6515003277900	Elevator Periosteal Langenbeck 8.25" Blunt Edge CRS		EA
6515003746900	Elevator Periosteal Matson 8.75-9" Double-Ended		EA
6515003301300	File Bone 10.5x3.5" Blade Str Serrated Coarse	-	EA
6515003311300	Forceps Bone Cutting Liston-Stille 10.25" Crvd		EA
6515011150416	Forceps Bone Holding Dingman Crvd 7.5" Serr	2	EA
6515011656744	Forceps Bone Holding Kern Self-Ctr 10.25" Med Crvd	2	EA
6515011648883	Forceps Bone Holding Verbrugge 9.75" Slightly Crvd	2	EA
6515003632400	Handle Bone Cutting Wire Saw Gigli Oval CRS		EA
6515012340253	Mallet Bone Surg CRS 7.5-11" Rect Head	_	EA
6515003109360	Pin Bone Kirschner Bayonet Pt Str Shank	2	EA
5110002241532	Pliers Diagonal Cutting 6" Ty1 Cl2 StyA	_	EA
5120006524545	Pliers Needle Nose		EA
6515002998053	Rongeur Adson CRS Sgl-Jointed Str Blade 8"	2	EA
6515003631100	Saw Amputating Satterlee 8" for Large Bone		EA
6515003632700	Saw Bone Cutting Wire Twist Drill 20"	2	EA
6530007940300	Tray Instrument Rectangle 20.6x12.6x4" Neutral Sz 5		EA
6530007940000	Tray Instrument Rectangle 15.5x0.5x2" TyII Sz 3 CRS	-	EA

Neurosurgical Supplement

NSN	Nomenclature	Quantity	NM
6515005152113	Brace Bit Bone Hudson 9.75" Snap-Lock Passivated	·	EA
6515003124125	Bur Cranial Hudson 14mm 6-Flute Truncated	1	EA
6515005152115	Bur Cranial Hudson 16mm Ball Head 8-Flute	1	EA
6515003124130	Bur Cranial Hudson 20mm Ball Head 8-Flute	1	EA
6515005152114	Bur Cranial Hudson 9mm Flame Head 6-Flute		EA
6515003632300	Conductor Bone Cutting Wire Saw Bailey Steel Overall	_	EA
6515003280700	Elevator Periosteal 7.75" Crvd Blade Sharp	1	EA
6515003277900	Elevator Periosteal Lagenbeck 8.25" Blunt Edge CRS	-	EA
6515011397944	Forceps Coagulation Malis 6" Titanium Extra Fine Tip	-	EA
6515011397860	Forceps Coagulation Malis Bipolar 7" Bayonet Shaped	1	EA
6515011397860	Forceps Coagulation Malis Bipolar Bayonet St 8.75"	1	EA
6515003632400	Handle Bone Cutting Wire Saw Gigli Oval CRS		EA
6515002998053	Rongeur Adson CRS Sgl-Jointed Str Blade 8"	1	EA
6515012132679	Rongeur Laminect Colclo Love-Kerrison 8" Stain Steel	1	EA
6515003314800	Rongeur Stille CRS Dbl-Jointed Crvd 9"	1	EA
6515003315400	Rongeur Stille-Luer Dbl-Jointed Str 9" Rd End Jaws	1	EA
6515003632700	Saw Bone Cutting Wire Twist Drill 20"	2	EA
6530007939945	Tray Instrument Rectangle 10.5x8x2" TyII Sz 2	1	EA

Thoracic Supplement

NSN	Nomenclature	Quantity	UM
6515011667827	Clamp Bronchus Sarot 9" Crvd Rt Jaw Box Lock Joint	1	EA
6515003279400	Elevator Set Periosteal Raspatory Doyen Crvd Blunt Edge		SE
6515003301300	File Bone 10.5" 3.5" Blade Str Serrated Coarse	—	EA
6515003669200	Forceps Bone Cutting Bethune 13.5" Cupped Screw Lock	_	EA
6515003359100	Forceps Lung Grasping Collin Triangular Jaw Rt Angle	4	EA
6515010457158	Knife Sternum Lebsche 10" Passivated Nonglare Finish	_	EA
6515012340253	Mallet Bone Surg CRS 7.5-11" Rect Head Lg 2	_	EA
6515003553300	Periosteotome Alexander-Farabeuf 8.25" Crvd F/Rib		EA
6515011346649	Retractor Rib Burford-Finocchieto Fenestrated Detach	_	EA
6515003617250	Retractor Rib Finocchieto CRS Fenestrated Blade	_	EA
6530007940300	Tray Instrument Rectangle 20.6x12.6x4" CRS Neutral Sz5		EA

General Anesthesia Set

NSN	Nomenclature	Quantity	UM
6515008801832	Adapter Rt Angle Elbow Tracheal Anesthesia Set		EA
6515008801833	Adapter 1-riece Hacheal Anesthesia Sel Cameter 1 Anesthesia Appar Gas Port O, Monitor N20 O, & Volat		EA
6515011256615	Blade Laryngoscope Adult Miller #3 194mm		EA
6515011249806	Blade Laryngoscope Med Adult #2 151mm		EA
6515012297741	Blade Laryngoscope Macintosh #4		EA
6515012041844	Blood Warming Equipment Self-Contained Temp Control	1	EA
6545013825876	Case Medical Instrument & Supply Set	1	EA
6515011216480	Cuff Sphygmomanometer Adult Nonconductive 19x102cm	-	EA
6515011742406	Defibrillator Monitor-Recorder Battery Operated Portable		EA
6230001631856	Flashlight 2 D-Cells Plast Str Watertight		EA
6515003323300	Forceps Tracheal Tube Magill Fenes & Serr Adl		EA
6515011398384	Handle Laryngoscope 2-Battery Univ Med Knurled	2	EA
6515005842893	Infusor Pressure Blood Collecting-Dispensing Bag Rubber	2	EA
6240005529672	Lamp Incandescent Frosted 2.5V .28Amp Bulb	2	EA
6515002998297	Mask Oronasal Inflat Periphery Lrg Adult Replacement		EA
6515012796450	Monitor Oxygen Battery Powered 6.75x3.5" Audible/Vis	1	EA
6515013156196	Monitor Patient Vital Signs 120/220V AC 60Hz 8x5x4"		EA
7240007730975	Pail Utility CRS 12" Surg Oper Room 12 QT	·	EA
6515010308636	Rebreathing Bag Gas Anesthesia Appar 3 Liter .859"	1	EA
NSN PENDING	Regulator Oxygen Gas Admin 3-port Ltwt Rugged		EA
6515012045394	Resuscitator Hand-Op Ipp Hight O2 Small & Med Adult	-	EA
6515010394884	Sphygmomanometer Aneroid 300mm Max Calibration	-	EA
6530005518681	Stand Surg Instrument Adjustable Olive Drab Enameled	-	EA
6515013146694	Stethoscope Combination Littman Classic II 28"		EA
NSN PENDING	Stimulator Nerve High/Low Amperage Port Lightweight	-	EA
6515011741477	Suction & Pressure Appar Surg 115/230V 50/60Hz AC	1	EA

General Anesthesia Set (cont.)

NSN	Nomenclature	Quantity	NO
6515010610662 6515012243309 6515003021500 6515011167003	Suction Apparatus Surg Thermotic Port/Stationary Support Tube For Both Adult & Pediatric Tubes Tube Inhaler 32" Force-Fit Conn Conductive Rubber Vaporizer Anes Drawover Multiple 85Ml Liquid Agent	2	EA EA EA
0.01.001.1001.00	Ventuator Amediaesta i meminario onygoni	•	לי

Nerve Block Anesthesia Set

NSN	Nomenclature	Quantity	UM
6545013825876 6515013156196 NSN PENDING 515011741477	Case Medical Instrument & Supply Set Monitor Patient Vital Signs 120/220V AC 60Hz 8x5x4" Stimulator Nerve High/Low Amperage Port Lightweight Suction & Pressure Appar Surg 115/230V 50/60Hz AC		EA EA EA
515011741477	Suction & Pressure Appar Surg 115/230V 50/60Hz AC	-	EA

Spinal Anesthesia Set

NSN	Nomen	Quantity	UM
6545013825876	Case Medical Instrument & Supply Set	1	EA
6515013156196	Monitor Patient Vital Signs 120/220V AC 60Hz 8x5x4"		EA
6515011741477	Suction & Pressure Appar Surg 115/230V 50/60Hz AC	1	EA

Basic Operating Room Equipment

NSN	Nomenclature	Quantity	UM
6515000140091	Cable Assembly Power Elect 2-Conductor 12'	∞	EA
6515011742406	Defibrillator Monitor-Recorder Battery-Op Port		EA
6515012066017	Electrosurgical Apparatus Mobile 115/230V 50/60Hz AC	2	EA
6230001631856	Flashlight 2 D-Cells Plast Str Watertight	9	EA
8415002687860	Gloves Welders' Leather Cattlehide Med	2	EA
6540012901157	Goggles Protective	10	EA
6525011608381	Illuminator X-Ray Film Fluore Illum		EA
6515005842893	Infusor Pressure Blood Collecting-Dispensing Bag Rubber	4	EA
6530013881638	Irrigator Surgical 120/230 50/60Hz AC 12x16x18"	-	EA
6515011841235	Light Head Fiber Optic Adjust Spot Coaxial 5mm Sheath	2	EA
6530013168733	Light Surgical Field 110V AC or 24V DC	9	EA
6530009622121	Pad Operating Table Plastic 2 Sections Head/Leg/Foot	2	EA
7240007730975	Pail Utility CRS 12" Surg Operation Room 12 Qt	3	EA
4110001156027	Refrigerator Mechanical Biologicals 115V	2	EA
6530014319005	Sink Unit Surgical Scrub & Utensil Hospital Field	2	EA
6530008902025	Stand Basin Folding Front Single Aluminum w/Case	2	EA
6530007916050	Stand IV Irrigation Container Stl Fold Cadmium Plated	2	EA
6530005518681	Stand Surgical Instrument Adjust Olive Drab Enameled	2	EA
6530009262151	Sterilizer Surgical Dressing Pressure Fuel Htd CRS 16x36"	2	EA
6530011896960	Sterilizer Surgical Instrument & Dressing 120/230V		EA
6515011725211	Stethoscope Electronic Non-Invasive Portable Doppler		EA
6515011741477	Suction & Pressure Appar Surg 115/230V 50/60Hz AC	2	EA
6515010610662	Suction Apparatus Surg Thermotic Port/Stationary	2	EA
6530007098175	Table Operating Room Field Overall 4-Section Top 73"	2	EA
6515012870607	Tourniquet System Pneumatic Auto 110/220V 50/60HzAC	-	EA
7210002999610	Towel Hand Cotton 36x17" Solid Green Gray Nondisp	9	EA
6530007939570	Tray Instrument CRS	2	EA

Appendix C Proposed AMAL 639 - Operating Room Equipment

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6515008801832	Adapter R Ang Elbow Tracheal Anes Set Conduct	4.00	EA FA	0900	0.001
6515011858446	Anapier 1-1 C Hach Alies Set Indirections Anes Apparatus Gas w/O2 Monitor	2.00	EA	114.0	6.200
6515011256615	Blade Laryngoscope Adult Size Miller No 3	2.00	EA	0.010	0.001
6515011249806	Blade Laryngoscope Miller Adult Size 2	2.00	EA	0.010	0.001
6515012297741	*Blade Laryngoscope Macintosh #4	2.00	EA	0.200	900.0
6515005152113	*Brace Bit Bone Hudson Snap Lock Passivated	1.00	EA	1.500	0.046
6515012041844	Blood Warming Equipment Self-Contained	2.00	EA	13.00	0.120
6515003124125	*Burr Cranial Hudson 14mm 6 Flute Truncated Cone	1.00	EA	0.240	0.010
6515005152115	*Burr Cranial Hudson 16mm 6 Ball Head 8 Flute	1.00	EA	0.170	0.024
6515003124130	*Burr Cranial Hudson 20mm 6 Ball Head 8 Flute	1.00	EA	0.320	0.038
6515005152114	*Burr Cranial Hudson 9mm Flame Head 6 Flute	1.00	EA	0.220	0.016
6150001440091	Cable Assembly Power	8.00	EA	2.400	0.133
6515003866600	Cannula Abdominal Poole 23FR Fenestrated Crvd Hub	4.00	EA	0.190	0.008
6515003866800	Cannula Brain Frazier 8FR Open End Tip CRS	4.00	EA	0.130	0.003
6515003867600	Cannula Laryngeal Angular Yankauer Brass	4.00	EA	0.190	900.0
6545013825876	Case Medical Instrument & Supply Set Soft	1.00	EA	2.000	0.300
6515006903212	Clamp Artery Debakey-Bahnson Crvd & Serrated	8.00	EA	0.500	0.060
6515008901682	Clamp Artery Glover Crvd & Serrated 27mm Jaw	4.00	EA	090.0	0.007
6515006903216	Clamp Artery Glover Crvd & Serrated 40mm Jaw	4.00	EA	0.090	0.009
6515006903215	Clamp Artery Glover Str & Serrated 40mm Jaw Bulldog	4.00	EA	090.0	0.008
6515011667827	Clamp Bronchus Sarot 9" Crvd Rt Jaw Box Lock Joint	1.00	EA	0.500	0.001
6515008901683	Clamp Vena Cava Satinsky Serrated Ratch-Pawl 10"	8.00	EA	0.640	0.094
6515003632300	Conductor Bone Cutting Wire Saw Bailey Steel	4.00	EA	090.0	0.004
6515011216480	Cuff Sphygmomanometer Adult Nonconductive	2.00	EA	0.690	0.059
6515003225550	Curette Mastoid Spratt Size 2 Spoon Shape Blade	2.00	$\mathbf{E}\mathbf{A}$	0.200	0.008
	,				

^{*} Items added to upgrade clinical capability.

Appendix C Proposed AMAL 639 - Operating Room Equipment

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6515003225600 6515003225700	Curette Mastoid Spratt Size 3 Spoon Shape Blade Curette Mastoid Spratt Size 5 Spoon Shape Blade	2.00	EA	0.190	0.011
6515003235380	Cutter Bone Pin Crv in Compound Leverage Knurled Hdl	1.00	EA	4.580	0.200
6515011742406	Defibrillator Monitor-Recorder Battery Operated Port	1.00	EA	40.00	1.000
6515003123500	Drill Hand Bone Smedberg Design Jacobs Chuck Design	4.00	$\mathbf{E}\mathbf{A}$	2.080	0.208
6515012460182	Drill Twist Bone Twist Drill Point 3" Length	2.00	PG	0.020	0.001
6515012066017	Electrosurgical Apparatus Mobile	2.00	EA	13.00	0.276
6515003280700	Elevator Periosteal 7.75" Crvd Blade CRS	3.00	EA	0.200	0.010
6515003277900	Elevator Periosteal Langenbeck Long Blunt Edge CRS	3.00	EA	0.250	0.004
6515003746900	Elevator Periosteal Matson Double-Ended Blunt Blade	2.00	EA	0.330	0.002
6515003279400	Elevator Set Periosteal Doyen Crvd Blunt Edge	1.00	SE	0.380	0.012
6515003301300	File Bone 3.5" Blade Str Serrated Coarse Cut Blunt Tip	3.00	EA	0.330	0.042
6230001631856	Flashlight Illumination Power Source 3V	10.0	EA	0.100	0.001
6515003669200	Forceps Bone Cutting Bethune Cupped Screw Lock	1.00	EA	1.720	0.056
6515003311300	Forceps Bone Cutting Liston-Stille Crvd Double CRS	2.00	EA	1.250	0.069
6515011150416	Forceps Bone Holding Crvd Dingman Serrated Jaw	4.00	EA	0.010	0.001
6515011656744	Forceps Bone Holding Kern Med Crvd 18mm Jaw	4.00	EA	1.000	0.050
6515011648883	Forceps Bone Holding Verbrugge Slightly Crvd	4.00	EA	1.040	0.050
6515011397944	Forceps Coagulation Malis 6" Titanium Extra Fine Tip	1.00	EA	0.010	0.001
6515011397860	Forceps Coagulation Malis Bipolar Bayonet 8.75"	1.00	EA	0.010	0.001
6515011885339	Forceps Coagulation Malis Bipolar 7" Bayonet	1.00	EA	0.090	0.003
6515003333700	Forceps Dressing 10" Str & Serrated Rd Tip	4.00	EA	0.420	0.014
6515003333100	Forceps Dressing Cushing 7" Str & Serrated Rd Tip	4.00	EA	0.070	0.003
6515003341400	Forceps Gall Duct Lahey 7.5" Box Lock Joint	8.00	$\mathbf{E}\mathbf{A}$	0.300	0.200
6515003373900	Forceps Gauze Pad Holding Foerster 9-9.75" Box Lock	16.0	EA	0.230	0.010
6515003345600	Forceps Hemo Halsted 5" Str Jaw CRS Box Lock	16.0	EA	0.110	0.008

^{*} Items added to upgrade clinical capability.

Appendix C
Proposed AMAL 639 - Operating Room Equipment

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6515003344900	Forceps Hemo Halsted 4.75-5.25" Slightly Crvd Serrated	16.0	EA	0.100	0.000
6515003343800	Forceps Hemo Kelly 5.25-5.75" Slightly Crvd Jaw	40.0	EA	0.150	0.010
6515003346800	Forceps Hemo Kelly 5.5" Str Jaw Box Lock CRS	8.00	EA	0.150	0.007
6515003344100	Forceps Hemo Mayo-Carmalt 7.75-8.25" O/A CRS	8.00	$\mathbf{E}\mathbf{A}$	0.290	0.019
651500065318	Forceps Hemo Mixter Half-Crvd 6.87-7.375"	8.00	EA	0.090	0.010
6515003349500	Forceps Hemo Pean Slightly Crvd Jaw 9" CRS	8.00	EA	0.350	0.020
6515003347400	Forceps Hemo Rochester-Ochsner Str Jaw 6.25-6.75"	8.00	EA	0.190	0.012
6515003347500	Forceps Hemo Rochester-Ochsner 7.25" Size 2	8.00	EA	0.300	0.010
6515003344300	Forceps Hemo Rochester-Pean 6-6.5" Qtr-Crvd CRS	16.0	EA	0.210	0.010
6515003382900	*Forceps Hemo Schmidt 7.25" Crvd Serrated Jaw	16.0	EA	0.190	0.040
6515010489066	Forceps Hemo Storz Rt Angle Jaw 8.75" CRS	8.00	EA	0.190	0.005
6515011398167	*Forceps Intestinal Angular Glassman Non-Crushing 9"	8.00	EA	0.010	0.001
6515003352900	Forceps Intestinal Babcock 7.75" Str Box Lock CRS	16.0	EA	0.180	0.010
6515003353200	Forceps Intestinal Doyen 8.75" Box Lock Joint CRS	8.00	EA	0.360	0.031
6515003353200	Forceps Intestinal Doyen Str 8.75-9.25" CRS Box Lock	8.00	EA	0.250	0.046
6515012983893	*Forceps Intestinal Rt Angle 9.25" Nondetach Box Lock	8.00	EA	0.240	0.040
6515003355800	Forceps Kidney Pedicle Guyon-Pean 9.25-9.5" Box Lock	4.00	EA	0.310	0.025
6515003359100	Forceps Lung Grasping Collin Triangular Jaw 8" CRS	4.00	EA	0.330	0.050
6515003377800	Forceps Tissue Adson 4.5" Tweezer Str & Smooth Jaw	8.00	EA	0.080	0.010
6515003380300	Forceps Tissue Allis 6" Pivoted Str & Smooth Jaw	16.0	EA	0.130	0.010
6515006903208	Forceps Tissue Debakey 7.75" Tweezer Str & Serr Jaw	16.0	EA	0.190	0.021
6515006903209	Forceps Tissue Debakey 9.5" Tweezer Str & Serr Jaw	8.00	EA	0.310	0.043
6515012983857	*Forceps Tissue Ferris-Smith Tweezer 7" 1x2 Teeth	8.00	EA	0.250	0.030
6515003204600	Forceps Towel Backhaus 5.25" Opposed Prongs CRS	16.0	EA	0.250	0.019
6515003323300	*Forceps Tracheal Tube Magill Fenes & Serr Adl w/o Lt	1.00	EA	0.650	0.050
8415002687860	Gloves Leather Mens Work Cowhide Gray Gauntlet Cuff	2.00	PR	0.520	0.006

^{*} Items added to upgrade clinical capability.

Appendix C Proposed AMAL 639 - Operating Room Equipment

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6540012901157	Goggles Protective Infection Distortion-Free Lenses Adj Handle Rone Cutting Wire Saw Rectang w/Rounded Ends	3.00	PG PR	4.500	0.005
6515011398384	Handle Laryngoscope Accom 2 Btry Knurled CRMetal	2.00	EA	0.010	0.001
6515011417469	*Handle Surgical Knife Detachable Blade Sz 3L	1.00	EA	0.125	1.018
6515003447800	Handle Surgical Knife Detachable Blade Sz 3 Narrow	8.00	EA	0.080	0.002
6515005843736	Holder Suture Needle Brown 5.25" Serr Jaws Str CRS	8.00	EA	0.210	0.010
6515003417200	Holder Suture Needle Collier 5" Str Jaw Box Lock	8.00	EA	0.160	0.012
6515006903198	Holder Suture Needle Debakey 7" Serr Tungsten Carb	8.00	EA	0.010	0.010
6515006903200	Holder Suture Needle Debakey 9" Serr Tungsten Carb	8.00	EA	0.310	0.023
6515002998737	Holder Suture Needle Hegar-Mayo 7" Serr Tung Carb	8.00	EA	0.220	0.010
6515003423100	Hook Iris Tyrell CRS 2/3 Circle 5" Blunt Tip	8.00	EA	0.201	0.013
6525011608381	Illuminator X ray Film Fuorescent 115V 50/60Hz AC	1.00	EA	25.00	1.477
6515005842893	Infusor Pressure Blood Collecting-Dispensing Bag	4.00	EA	0.750	0.063
6530013881638	Irrigator Surgical 120/230 50/60Hz 1000 Pulses/Min	1.00	EA	00.09	0.600
6515010457158	Knife Sternum Lebsche 10" Passivated Nonglare Finish	1.00	EA	0.500	0.063
6240005529672	Lamp Incandescent B25 T Bulb Style 2.5V Frosted White	00.9	EA	0.045	0.001
6515011841235	Light Head Fiber Optic Adj Spot Coaxial Hdlt 5mm Shth	2.00	EA	3.500	0.784
6530013168733	Light Surgical Field 110V AC or 24V DC	00.9	EA	120.0	15.00
6515012340253	Mallet Bone Surgery CRS 7.5-11" 21bs	3.00	EA	2.000	0.041
6515002998297	Mask Oronasal Lrg Adult Replacement Mask-Anes App	2.00	EA	0.580	0.056
6515012796450	Monitor Oxygen Battery Powered Audible/Visual Alarm	2.00	EA	4.500	0.305
6515013156196	Monitor Patient Vital Signs 120/220V 60Hz Battery/Cord	2.00	EA	000.6	0.300
6530009622121	Pad Operating Table Plastic 2 Sections for Shipboard Use	2.00	EA	5.420	0.875
7240007730975	Pail Utility CRS 12Qt 12" Ht	3.00	EA	5.167	0.417
6515003553300	Periostome Alexander-Farabeuf 8.25" Crvd Rib Surgery	1.00	EA	0.380	0.017
6515003109360	Pin Bone Kirschner Bayonet Point Str Shank CRS 12s	4.00	PG	0.090	0.001

^{*} Items added to upgrade clinical capability.

Appendix C Proposed AMAL 639 - Operating Room Equipment

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
5110002241532	Pliers Diagonal Cut Pliers Needle Nose	2.00	EA EA	0.380	0.010
6515011190787	Probe Gen Oper 10" CRS Spatulate Handle Bulbous Tip	4.00	EA	0.106	0.021
6515011190018	Probe Gen Oper 5" CRS Spatulate Handle Bulbous Tip	4.00	EA	0.360	0.049
6515010308636	Rebreathing Bag Gas Anesthes Apparatus 3Li	4.00	EA	0.930	0.031
4110001156027	Refrigerator Mechanical Biologicals 4.5Cu Ft	2.00	EA	110.0	13.41
NSN PENDING	*Regulator Oxygen Gas Admin Rhino 3 port Ltwt Rugged	2.00	EA	1.500	0.050
6515012045394		2.00	EA	3.000	0.070
6515003604910	-	4.00	EA	3.170	0.354
6515011398969	Retractor Abdominal Codman-Shurtleff Sz 2.5 Two Blade	4.00	EA	3.500	0.451
6515003603490	Retractor Abdominal Deaver 1x12" Size CRS	4.00	EA	0.560	0.069
6515003603530	Retractor Abdominal Deaver 2x12" Size CRS	4.00	EA	0.720	0.069
6515003603510	Retractor Abdominal Deaver 1.5x12" Size CRS	4.00	EA	0.690	0.067
6515011398195	Retractor Abdominal Kelly 3x3.5" Serr Toungue Pass	4.00	EA	0.010	0.001
6515011398407	Retractor Abdominal Richardson 9 1/8" Blade 1x.75"	8.00	EA	0.010	0.001
6515011398196	Retractor Gen Oper Harrington 13x2.25" Crvd Rt Pass	4.00	EA	0.010	0.001
6515003610350	Retractor Gen Oper Volkman 8.5" 4-Prong CRS	8.00	EA	0.180	0.028
6515009269193	Retractor Mastoid Weitlaner 6.5" Hook Unit 3vs4 Prongs	8.00	EA	0.310	0.013
6515003614850	Retractor Perineal Gelpi CRS Hook Unit 6.5" Self-Ret	8.00	EA	1.000	0.025
6515011346649	Retractor Rib Rurford-Finocchieto Fenestrated Detach	1.00	EA	5.469	0.605
6515003617250	Retractor Rib Finocchieto CRS Fenestrated Blade Med	1.00	EA	2.590	0.127
6515012080578	Retractor Ribbon Flexsteel Blade Size 1x13"	4.00	EA	1.750	0.015
6515003603850	Retractor Set Abdominal Richardson-Eastman Dbl-End	4.00	SE	0.810	0.144
6515003609200	Retractor Set Gen Oper Dble-End 8.5" & 8.75" Blades	4.00	SE	0.430	0.031
6515003618980	Retractor Tracheal Hupp CRS Sharp Blade Pt 3-Prong	8.00	EA	0.130	0.014
6515011398197	Retractor Vagotomy Weinberg 6.375x4" Blade One Size	4.00	EA	0.010	0.001

^{*} Items added to upgrade clinical capability.

Appendix C Proposed AMAL 639 - Operating Room Equipment

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6515003620200	Retractor Vein Cushing 8.5" CRS	8.00	EA	0.240	0.014
6515002998033	Rongeur Adson CKS Sgl-Jointed Str Blade 8 Rongeur Love Vermicon Steinlag Steel Organ 11 Inn. 2/163	3.00	EA EA	0.750	0.010
6515012132819	Rongett Stille CRS Dkl. Jointed Cryd 0"	1.00	EA	1.050	0.036
6515003315400	Rongeur Stille-Luer Dbl-Jointed Str 9" Rd End Jaws	1.00	EA	1.000	0.070
6515003631100	Saw Amputating Satterlee 8" Blade for Lrg Bone Sawing	2.00	EA	0.690	0.042
6515003632700	Saw Bone Cutting Wire 20" w/o Handle CRS	3.00	EA	0.030	0.003
6515003651820	Scissors Gen Surg 5.5" One Blunt/One Sharp Blade Pt	8.00	EA	0.130	900.0
6515003640520	Scissors Gen Surg Mayo Crvd Blade 6.5-7" Blunt Blades	4.00	EA	0.080	0.004
6515003640500	Scissors Gen Surg Mayo5.25-5.75" Crvd Blade Blunt Pts	4.00	EA	0.140	900.0
6515003640920	Scissors Gen Surg Mayo 6.5-7" Blunt Pts	4.00	EA	0.350	0.007
6515010895668	Scissors Gen Surg Metzenbaum Delicate Dissecting 11"	4.00	EA	0.460	0.015
6515006903223	Scissors Gen Surg Potts Smith 7.5" Ang to Hdl 60Deg	4.00	EA	0.140	0.007
6515003644800		4.00	EA	0.120	900.0
6515003656200	Scissors Tenotomy Stevens 4-4.5" Crvd Blade Blunt Pts	4.00	EA	090.0	0.002
6515003657100	Scissors Tonsil Metzenbaum 7" Crvd Blade Blunt Pts	8.00	EA	0.160	0.005
6515011511822	Scissors Wire Cutting Surg 4.75" Short Ang to Side Jaw	4.00	EA	0.010	0.001
6530014319005	Sink Unit Surg Scrub & Utensil Hospital Field	2.00	EA	15.25	0.185
6515011397550	Speculum Rectal Pratt 8.5" Setscrew Lock CRS	4.00	$\mathbf{E}\mathbf{A}$	0.010	0.001
6515010394884	Sphygmomanometer Aneroid 300mm Max Calib w/Clip	3.00	EA	1.250	0.100
6530008902025	Stand Basin Aluminum 32x15.25x17" w/Carry Case	2.00	EA	5.830	0.667
6530007916050	Stand IV Irrigat Container Stl Cadmium Plated	2.00	EA	4.830	0.183
6530005518681	Stand Surg Instrument Adjust Olive Drab Enam Field	2.00	EA	17.00	1.750
6530011896960	Sterilizer Surg Instrument & Dressing 120/230V	1.00	EA	67.00	2.470
6515013146694	Stethoscope Comination Littman Classic II 28" Bell-Dia	2.00	EA	1.000	0.003
6515011721152	Stethoscope Electronic Noninvasive Port Batt-Oper 8 MHz	1.00	EA	2.000	0.300

^{*} Items added to upgrade clinical capability.

Appendix C Proposed AMAL 639 - Operating Room Equipment

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
NSN PENDING	*Stimulator Nerve High/Low Output Lightweight Port.	2.00	EA	0.080	0.025
6515011741477	Suction & Press Appar 115/230V 50/60Hz Port w/Case	2.00	EA	15.00	1.988
6515010610662	Suction Apparatus Surg Port or Stationary	2.00	$\mathbf{E}\mathbf{A}$	7.000	0.535
6515012243309	Support Tube Support Both Adult & Pediat	1.00	EA	0.150	0.024
6530007098175	Table Operating Room Field	2.00	EA	150.0	10.00
6515012870607	Tourniquet System Pneumatic Auto w/Case	1.00	EA	26.00	12.10
7210002999610	Towel Hand Cotton 36x17" Solid Green Gray Nondisp	30.00	EA	0.240	0.010
6530007940300	Tray Instrument 20 5/8x12 5/8x4" CRS	7.00	EA	7.000	0.850
6530007939945	Tray Instrument 10.5x8x2" CRS	1.00	EA	1.500	0.146
6530007940000	Tray Instrument 15.5x9.5x2" CRS	00.9	EA	2.860	0.194
6530007939570	Tray Instrument 19.25x12.75x.75" CRS	2.00	EA	3.250	0.150
6515003021500	Tube Inhaler 32" Force-Fit Conn Conductive Rubber	00.9	EA	0.710	0.075
6515012899820	Vaporizer Anesthesia Drawover	2.00	EA	20.00	2.000
6515011167903	Ventilator Mobile Volume	2.00	EA	67.00	6.100
5120002643794	Wrench Adjustable	1.00	EA	0.503	0.401

^{*} Items added to upgrade clinical capability.

Appendix D Consumable Requirements for Operating Room Procedures

Basic Set-up Consumable Set

NSN	Nomenclature	Quantity	NM
6510013414509	Adhesive Tape Surg Silk White 360x1" Single Thk Hypo	1	RL
6510012624495	Adhesive Tape Surg Silk White 360x2" High Strength	-	R
6515012346838	Applicator 6"LG Cotton or Poly Squared Off Tip Disp	2	EA
6530011075798	Bag Sterilization-Biohazard Disp 36x24"	2	EA
NSN PENDING	Bandage Elastic Coban Flesh 3"x5YD	3	RL
6515010882616	Blade Electrode Electrosurg 1" Lg CRS Plas Shank	2	EA
6515012812858	Blade Extended Electrosurg Electrode 6" Ster Disp	2	EA
6515010095295	Blade Surgical Knife Detachable #10	2	EA
6515010095293	Blade Surgical Knife Detachable #15		EA
6530013624977	Bottle Spray 16OZ Plas Can Be Used as Dropper Bottle	_	EA
6530011642727	Brush Surg Scrub 3" Shoe Hdl w/Hexachlorine Dispenser	_	$\mathbf{E}\mathbf{A}$
6515010747812	Cannula Laryngeal Yankauer w/o Cont Vent Str Distal End	1	EA
6532000048055	Cap Operating Surg Univ Sz Rayon Main Body Disp	3	EA
6530011832863	Container Disposal Hypo Needle & Syringe 6.9 Qt Plas	1	EA
6530010549989	Cover Surg Instrument Stand Mayo Water Res 23.5x48"	1	EA
6530012708801	Drape Surg 126x86" Disp Ster 12" Center Opening	_	EA
6530010324089	Drape Surg Nonwoven Fabric Disp 6'x44" Half Sheet	2	EA
6515011977649	Electrode Grounding Electrosurg Pregelled Self-Adh		EA
6515013648553	Glove Patient Exam/Treat Med Prepowder Snug Fit Cuff	10	EA
6515011498840	Gloves Surg Gen Surg Sz 7 Rubber Prepowder Ster Disp	3	PR
6515011498841	Gloves Surg Gen Surg Sz 7.5 Rubber Prepowder Ster Disp	3	PR
6515011498842	Gloves Surg Gen Surg Sz 8 Rubber Prepowder Ster Disp	3	PR
6515013882493	Handpiece Irrigator Surg w/Irrigation Control & 3 Lumens	_	EA
6515007822621	Mask Surg Nonwoven Fabric Glass/Syn Fiber Filter Disp	က	EA
6515012931880	Needle Suture French Spring Eye Sz2 B3 1/2 Cir	3	EA
6515003509680	Needle Suture Keith Abdominal B% Straight 2.8"LG	_	EA
	, 1		

Appendix D Consumable Requirements for Operating Room Procedures

Basic Set-up Consumable Set (cont.)

NSN	Nomenclature	Quantity	UM
6510007863736	Pad Isopropyl Alcohol Impreg Nonwyn Cotton/Rayon	10	EA
6515011535294	Pad Magnetic Needle & Blade 21/2x83/4 IN Disp	1	EA
6510009862942	Pad Nonadherent 8x3" Nonwvn Cotton IP Ster White	2	EA
6515013148918	Pencil Electrode Electrosurg Str Shape 10 Ft Cord		EA
6505007540374	Povidone-Iodine Topical Solution 1% USP 1 GL		EA
6515013882477	Pump Set Dual Spike Wound Debridement System	1	EA
6515013225898	Razor Surg Preparation Plas Stationary Dsgn Solid Hdl1	1	EA
6515010503557	Skin Prep Kit Preoperative Ster	_	$\mathbf{E}\mathbf{A}$
6505013308926	Sodium Chloride Irrigation USP 0.9% 1000 ML Btl	4	EA
6510001161285	Sponge Surg Gauze 12-Ply Abs 4x8" White Radpq Ster	_	CO
6532004056009	Surgical Pack Gown/Towel Nonwyn Fabric Ster Disp Lrg	3	EA
6515013553928	Suture Abs GI 3-0 1 27" Strand Ndl SH-1 Ctd Vicryl Br	5	EA
6515013549470	Suture Abs OBGYN 0 1 36" Strand Ndl CTX Ctd Vicryl	5	EA
6515013559786	Suture Abs Uro 2-0 1 27" Strand Ndl UR-5 Vicryl Br	5	EA
6515010758288	Suture Nonabs 2-0 2.5' Silk Black Unarmed Br Ster	5	EA
6515000678243	Suture Nonabs 3-0 17 1.5' Unarmed Silk Black Br Ster	5	EA
6515002647644	Syringe Plastic Bulb 90cc Cap Grad 10cc Disp IP	2	EA
6515013874950	Tip Irrigator Surg Multiple Orifices 4.5"x3/16" Plas Disp	1	EA
6530001101854	Towel Pack Surg Blue/Gray or Green Ster Disp 19x26"	2	EA
6515000992951	Tube Connecting Surg Apparatus St 120"	1	EA
6515013896158	Tube Suction Surg Poole Open End Tip 72" Plas Clear	.	EA

Task: 455 Amputation Upper Arm Task: 456 Amputation Forearm Task: 457 Amputation Upper Leg Task: 458 Amputation Lower Leg

Basic Major Set
Orthopedic Supplement
Basic Set-up Consumables (See D-1 - D-2)

NSN	Nomenclature	Quantity	NM
6510008172632	Bandage Felt Ortho 6x4	2	EA
6510000583047	Bandage Gauze Kerlix 4.5x4Yd	2	RL
6515012525599	Stapler Skin Surg Ster Disp Lightwt Staples Wide	4	$\mathbf{E}\mathbf{A}$
6510005593159	Stockinet Surgical 25Ydx4" Cotton Yarn White/Nat	2	RL
6515011433743	*Suture Nonabs Gen Clo Sz 0 8 18" Strands Pull-off Ndl	5	$\mathbf{E}\mathbf{A}$
6515009652511	Wax Bone 57-62.8°C Melt Pt Plas Aluminum 2.5 Gm	1	EA

^{*}Additional suture in the Basic Set-up Consumables list

Task: 374 Bowel Wound Closure/Resection

Basic Major Set
Basic Set-up Consumables (See D-1 - D-2)

NSN	Nomenclature	Quantity	M
6515001490104	Catheterization Kit Urethral w/Bot-Outlet Drain Bag 16Fr	1	EA
6515011399104	Clip Hemostatic Large Color Coded Sterilizable Ster CRS	2	EA
6515011399084	Clip Hemostatic Med Color Coded Ster	2	EA
6515011738925	Clip Hemostatic Tantalum O/A Color Coded Ster	2	EA
6515013414524	Drainage Kit Closed Suction Jackson-Pratt Radpq		EA
6510011603261	Sponge Laparotomy Disp Radpq 18x18" Prewashed	5	EA
6515013354623	Staple Unit Surg Multifire GIA 60 w/60 Titanium Staples	-	EA
6515013285220	Staple Unit Surg Titanium Med 3-5 u/w Multifire TA-30	_	EA
6515013285219	Staple Unit Surg Titanium Med 3-5 u/w Multifire TA-55	1	EA
6515013354624	Stapler Surgical 30 Units Cap Multifire TA w/30 Staples		EA
6515013354625	Stapler Surgical 55 Units Cap Multifire TA w/55 Staples		EA
6515013354629	Stapler Surgical 60 Units Cap Multifire GIA w/60 Staples	-	EA
6515013995911	*Suture Nonabs Surg Gastro-Intestinal & Neurosurgical	2	EA
6515001490316	Tube Stomach Surg Plas Salem E19 w/Funnel 16Fr Lumen	1	EA

^{*}Additional suture in the Basic Set-up Consumables list

Task: 467 Fasciotomy

NSN	Nomenclature	Quantity	UM
6510000583047	Bandage Gauze Kerlix 4.5x4Yd	2	RL
6515010095295	Blade Surgical Knife Detachable #10	-	EA
6515010095293	Blade Surgical Knife Detachable #15		EA
6515011535294	Pad Magnetic Needle & Blade 21/2x83/4 IN Disp	1	EA
6505007540374	Povidone-Iodine Topical Solution 1% USP 1 GL	10	ZO
6505013308926	Sodium Chloride Irrigation USP 0.9% 1000 ML Btl	1	EA
6510001161285	Sponge Surg Gauze 12-Ply Abs 4x8" White Radpq Ster	1	00

Task: 501 Kidney Repair
Task: 508 Complete Nephrectomy

Basic Major Set Basic Set-up Consumables (See D-1 - D-2)

NSN	Nomenclature	Quantity	NM
6515012812858	Blade Extended Electrosurg Electrode 6" Sz Ster Disp		EA
6515001490104	Catheterization Kit Urethral w/Bot-Outlet Drain Bag 16Fr		EA
6510010854742	Cellulose Oxidized Regenerated 8x4" Yellow Ster 1-Ply	2	EA
6510010701494	Collagen Hemo Powder Abs Ster Topical 1 GM Jar	4	JR
6510000802054	Gelatin Sponge Abs USP IS 12.5x8x1 CM	2	EA
6510007755706	Pad Abdominal 7.5x8" White 3 Layers Ster Seal Pkg	2	EA
6510011603261	Sponge Laparotomy Disp Radpq 18x18" Prewashed	10	EA
6515012525599	Stapler Skin Surg Ster Disp Lightwt Staples Wide	က	EA
6515013429169	*Suture Abs GI 2-0 8 18" Strands Ndl SH Plas	5	EA
6515012091168	*Suture Abs Surg Sutupak Unarmed Ctd Vicryl 3-0	5	EA
6505012144500	Thrombin USP Bovine Derived 20000 Un Thrombin 20ML	2	PG

^{*}Additional suture in the Basic Set-up Consumables list

Task: 494 Thorocotomy

Basic Major Set
Thoracic Supplement
Basic Set-up Consumables (See D-1 - D-2)

NSN	Nomenclature	Quantity	OM
6515012812858	Blade Extended Electrosurg Electrode 6" Sz Ster Disp		EA
6515011399104	Clip Hemostatic Large Color Coded Sterilizable CRS	2	EA
6515011399084	Clip Hemostatic Medium Color Coded 12MM Closed 12MM Open	n 2	EA
6515011738925	Clip Hemostatic Tantulum Color Coded O/A Sterile	2	EA
6515009269201	Connector Tubing Straight A18 Taper Serrations 3.5"LGx.188"Dia	a 2	EA
6515010587450	Drainage Unit Pleural Cavity Plas Water-Seal 3 Chamber 2300ML	, 2	EA
6510011603261	Sponge Laparotomy Disp Radpq 18x18" Prewashed	10	EA
6515013285220	Staple Unit Surg Titanium Med 3-5 Loading U/W Multifire TA-30) 1	EA
6515013285219	Staple Unit Surg Titanium Med 3-5 Loading U/W Multifire TA-55	5 1	EA
6515012525599	Stapler Skin Surg Ster Disp Lightweight Staples SZ Wide	5	EA
6515013354624	Stapler Surg 30 Units Multi-fire TA w/30 Staples 3.5MM Wide		EA
6515013354625	Stapler Surg 55 Units Mutli-fire TA w/55 Staples 3.5MM Blue	1	EA
6515012552835	*Suture Abs Gen Clo 2-0 27" Ndl Ct Vicryl Nat	5	EA
6515012091168	*Suture Abs Surg Sutupak Unarmed Coated Vicryl Natural SZ 3-0	5	EA
6515001395911	*Suture Abs Surg Liver 1 Sgl Armed 3' Polyglycolic Acid		EA
6515009268884	Tape Adhesive Surgical Porous Wovwn Rayon 3INx10YDS		R
6515008669073	Tube Drainage Surgical C18 Toracic 36FR Str 6-Eye Plas Disp	2	EA
6515009269150	Valve Surgical Drain Heimlich 4.5IN LGx11N Dia Flutter Rbbr	2	EA

^{*}Additional suture in the Basic Set-up Consumables list

Task: Z378 Vascular Repair-Temporary/Ligate

Basic Major Set
Basic Set-up Consumables (See D-1 - D-2)

	Procedure-Specific Consumables		
NSN	Nomenclature	Quantity	N
6515013526420	Ball Joint Lightweight Alloy	2	EA
6515012812858	Blade Extended Electrosurg Electrode 6" Sz Ster Disp		EA
NSN PENDING	Cast Polymer Material 6"x15" Roll	7.5	FT
6515011774924	Catheter Cardio Fogarty Embolectomy 6Fr 80CM Male	-	$\mathbf{E}\mathbf{A}$
6515011399050	Catheter Cardio Fogarty Embolectomy Radpq Disp 4Fr	-	EA
6510010854742	Cellulose Oxidized Regenerated 8x4" Yellow Ster 1-Ply	2	EA
6515011399104	Clip Hemostatic Large Color-Coded Sterilizable Ster CRS	2	EA
6515011399084	Clip Hemostatic Med Color-Coded Ster	2	EA
6515011738925	Clip Hemostatic Tantalum O/A Color Coded Ster	2	EA
6510010701494	Collagen Hemo Powder Abs Ster Topical 1 GM Jar	4	JR
6515013253715	Fixation Device External Ortho Steam/Gas Sterilizable	2	$\mathbf{E}\mathbf{A}$
6510000802054	Gelatin Sponge Abs USP IS 12.5x8x1 CM	2	EA
6505001539740	Heparin Sodium Inj USP 1000 Units/ML 10 ML	_	VI
6515013194059	Implant Arterial Plas Str Design 70CMx6MM Thin Wall	1	EA
6515011656718	Loop Vascular Surg Silicone Rubber Blue Oval Loop	2	EA
6515012423997	Pledget Suture Teflon Medium Firm 1/2x1/8"		EA
6515011700642	Shunt Carotid Bypass Tapered 17-10Fr Dia	1	EA
6510011603261	Sponge Laparotomy Disp Radpq 18x18" Prewashed	S	EA
6515012525599	Stapler Skin Surg Ster Disp Lightwt Staples Wide	4	EA
6515012091168	*Suture Abs Surg Sutupak Unarmed Ctd Vicryl 3-0	5	EA
6515010619871	*Suture Abs 3-0 30" Ndl SH B3 1/2 Cir Black Br	5	EA
6515013553908	*Suture Nonabs surg 4-0 1 18" Strand Ndl FS-1 Ethilon	5	EA
6515007540412	Syringe Hypo 10ML Luer Slip w/oNeedle	1	EA
6505012144500	Thrombin USP Bovine-Derived 20000 Un Thrombin 20ML	2	ЬG
*Additional suture in the Basic Set-up Consumables list	Set-up Consumables list		

Task: 373 Splenectomy

Basic Major Set Basic Set-up Consumables (See D-1 - D-2)

NSN	Nomenclature	Quantity	UM
6515012812858	Blade Extended Electrosurg Electrode 6" Sz Ster Disp		EA
6515001490104	Catheterization Kit Urethral w/Bot-Outlet Drain Bag 16Fr	1	EA
6510010854742	Cellulose Oxidized Regenerated 8x4" Yellow Ster 1-Ply	7	EA
6510010701494	Collagen Hemo Powder Abs Ster Topical 1 GM Jar	4	JR.
6510000802054	Gelatin Sponge Abs USP IS 12.5x8x1 CM	2	EA
6515012616896	Implant Mesh Polypropylene Surg 12x12" Sgl Ply Nonabs	9	EA
6515013758519	Implant Mesh Surg 12x12" Polyester Plas Autocavable	9	$\mathbf{E}\mathbf{A}$
6510007755706	Pad Abdominal 7.5x8" White 3 Layers Ster Seal Pkg	1	EA
6510011603261	Sponge Laparotomy Disp Radpq 18x18" Prewashed	2	EA
6515012525599	Stapler Skin Surg Ster Disp Lightwt Staples Wide	2	EA
6515012931888	*Suture Abs Gen Clo 0 18" Ndl CTX Pds Violet Mono	9	EA
6515012552835	*Suture Abs Gen Clo 2-0 27" Ndl Ct Vicryl Nat	9	EA
6515013365873	*Suture Abs Surg Liver 0 Sgl Armed 36" Gut Br Ndl CE-9	9	EA
6515010619871	*Suture Abs 3-0 30" Ndl SH B3 1/2 Cir Black Br	9	EA
6515001395911	*Suture Abs Surg Liver 1 Sgl Armed 3' Polyglycolic Acid	-	EA
6515010758288	*Suture Nonabs 2-0 2.5' Silk Black Unarmed Br Ster	9	EA
6505012144500	Thrombin USP Bovine Derived 20000 Un Thrombin 20ML	2	ЬG

^{*}Additional suture in the Basic Set-up Consumables list

Task: 488 Neck Structure Repair

Basic Major Set Basic Set-up Consumables (See D-1 - D-2)

NSN	Nomenclature	Quantity	MD
6510010854742	Cellulose Oxidized Regenerated 8x4" Yellow Ster 1-Ply	2	EA
6510000802054	Gelatin Sponge Abs USP IS 12.5x8x1 CM	2	EA
6515011700642	Shunt Carotid Bypass Tapered 17-10Fr Dia		EA
6515012525599	Stapler Skin Surg Ster Disp Lightwt Staples Wide	4	EA
6515012091168	*Suture Abs Surg Sutupak Unarmed Ctd Vicryl 3-0	5	EA
6515010619871	*Suture Abs 3-0 30" Ndl SH B3 1/2 Cir Black Br	5	EA
6515012174320	*Suture Nonabs Cardio 5-0 18" Ndl RB-1 Blue	5	EA
6515011399090	*Suture Nonabs Surg Cardio 6-0 Dbl Armed 30" Plas	5	EA
6515013553908	*Suture Nonabs Surg 4-0 1 18" Strand Ndl FS-1 Ethilon	5	EA
6505012144500	Thrombin USP Bovine Derived 20000 Un Thrombin 20ML		PG

^{*}Additional suture in the Basic Set-up Consumables list

Task: 372 Operation to Liver (Not Resection)

Basic Major Set Basic Set-up Consumables (See D-1 - D-2)

NSN	Nomenclature	Quantity	UM
6515012812858	Blade Extended Electrosurg Electrode 6" Sz Ster Disp		EA
6515001490104	Catheterization Kit Urethral w/Bot-Outlet Drain Bag 16Fr	—	EA
6510010854742	Cellulose Oxidized Regenerated 8x4" Yellow Ster 1-Ply	2	EA
6510010701494	Collagen Hemo Powder Abs Ster Topical 1 GM Jar	4	R
6510000802054	Gelatin Sponge Abs USP IS 12.5x8x1 CM	7	EA
6510007755706	Pad Abdominal 7.5x8" White 3 Layers Ster Seal Pkg	2	EA
6510011603261	Sponge Laparotomy Disp Radpq 18x18" Prewashed	15	EA
6515012525599	Stapler Skin Surg Ster Disp Lightwt Staples Wide	2	EA
6515012931888 *	*Suture Abs Gen Clo 0 18" Ndl CTX Pds Violet Mono	9	EA
6515012552835 **	*Suture Abs Gen Clo 2-0 27" Ndl Ct Vicryl Nat	9	EA
6515013365873 *	*Suture Abs Surg Liver 0 Sgl Armed 36" Gut Br Ndl CE-9	9	EA
6515010619871 *	*Suture Abs 3-0 30" Ndl SH B3 1/2 Cir Black Br	9	EA
6515001395911 *	*Suture Abs Surg Liver 1 Sgl Armed 3' Polyglycolic Acid	_	EA
6505012144500	Thrombin USP Bovine Derived 20000 Un Thrombin 20ML	2	PG

^{*}Additional suture in the Basic Set-up Consumables list

Task: 403 Burr Hole

Basic Major Set
Neuro Supplement
Basic Set-up Consumables (See D-1 - D-2)

NSN	Nomenclature	Quantity	OM
6510000583047	Bandage Gauze Kerlix 4.5x4Yd		RL
6510010854742	Cellulose Oxidized Regenerated 8x4" Yellow Ster 1-Ply	2	EA
6510000802054	Gelatin Sponge Abs USP IS 12.5x8x1 CM	2	EA
6510011397542	Sponge Surg Rayon Radpq 1x3" White Ster Strung (Cotonoid)	2	EA
6515013015252 *	*Suture Nonabs Neurosurg 4-0 18" Ndl TF Nurolon	-	EA
6505012144500	Thrombin USP Bovine Derived 20000 Un Thrombin 20ML	_	PG

^{*}Additional suture in the Basic Set-up Consumables list

Task: 106 Escharotomy w/o General Anesthesia

Basic Major Set

NSN	Nomenclature	Quantity	NO
6510013414509	Adhesive Tape Surg Silk White 360x1" Single Thk Hypo	1 RL	
6530011075798	Bag Sterilization-Biohazard Disp 36x24"	2 EA	
6510000583047	Bandage Gauze Kerlix 4.5x4Yd	2 RL	
6515010095295	Blade Surgical Knife Detachable #10	2 EA	
	Brush Surg Scrub 3" Shoe Hdl w/Hexachlorine Dispenser	2 EA	
6532000048055	Cap Operating Surg Univ Sz Rayon Main Body Disp	4 EA	
	Catheterization Kit Urethral w/Bot-Outlet Drain Bag 16Fr	1 EA	
6515012277037	Depressor Tongue 6" Reg Sz Ster Disp	2 EA	
	Drape Surg 126x86" Disp Ster 12" Center Opening	1 EA	
6530010324089	Drape Surg Nonwoven Fabric Disp 6'x44" Half Sheet	2 EA	
_	Gloves Surg Gen Surg Sz 7 Rubber Prepowder Ster Disp	2 PR	
	Gloves Surg Gen Surg Sz 7.5 Rubber Prepowder Ster Disp	2 PR	
~	Gloves Surg Gen Surg Sz 8 Rubber Prepowder Ster Disp	2 PR	
	Mask Surg Nonwoven Fabric Glass/Syn Fiber Filter Disp	4 EA	
	Pad Magnetic Needle & Blade 21/2x83/4 IN Disp	1 EA	
	Sodium Chloride Irrigation USP 0.9% 1000 ML Btl	2 EA	
	Sponge Surg Gauze 12-Ply Abs 4x8" White Radpq Ster	1 CO	
6532004056009	Surgical Pack Gown/Towel Nonwyn Fabric Ster Disp Lrg	2 EA	
6530001101854	Towel Pack Surg Blue/Gray or Green Ster Disp 19x26"	2 EA	

Task: 358 Tracheostomy

Basic Major Set

NSN	Nomenclature	Quantity	MO
6530011075798	Bag Sterilization-Biohazard Disp 36x24"	1	EA
6515010095293	Blade Surgical Knife Detachable #15	-	EA
6530013624977	Bottle Spray 16oz Plas Can Be Used as Dropper Bottle	_	EA
6515004588411	Catheter & Connector Suction Trach 14Fr Whistle Tip	1	EA
6515011977649	Electrode Grounding Electrosurg Pregelled Self-Adh	-	EA
6515012321857	Ligature Umbilical 30x.125" Cotton Braided Ster	1	EA
6515011535294	Pad Magnetic Needle & Blade 21/2x83/4 IN Disp	.	EA
6515013148918	Pencil Electrode Electrosurg Str Shape 10 Ft Cord		EA
6505007540374	Povidone-Iodine Topical Solution 1% USP 1 GL	1	EA
6510001161285	Sponge Surg Gauze 12-Ply Abs 4x8" White Radpq Ster		00
6530001101854	Towel Pack Surg Blue/Gray or Green Ster Disp 19x26"	4	EA
6515000992951	Tube Connecting Surg Apparatus St 120"	1	EA
6515013908215	Tube Tracheostomy Portex Cuffed 11 MM OD 82"		EA

Task: 509 Repair Urinary Bladder

Basic Major Set
Basic Set-up Consumables (See D-1 - D-2)

NSN	Nomenclature	Quantity	UM
6515001490104	Catheterization Kit Urethral w/Bot-Outlet Drain Bag 16Fr		EA
6515013879496	Drain Surg Malecot C1 4 Wing Tip Head 36Fr Adult	_	EA
6510011603261	Sponge Laparotomy Disp Radpq 18x18" Prewashed	15	EA
6515012525599	Stapler Skin Surg Ster Disp Lightwt Staples Wide	3	EA
6515013429169	*Suture Abs GI 2-0 8 18" Strands Ndl SH Plas	5	EA
6515012091168	*Suture Abs Surg Sutupak Unarmed Ctd Vicryl 3-0	5	EA

^{*}Additional suture in the Basic Set-up Consumables list

Task: 530 Induce/Maintain General Anesthesia

NSN	Nomenclature	Quantity	NM
6505002998179	Albumin Human USP 25% 100ML Can	3	EA
6505011169245	Albuterol Inhalation Aerosol 17GM Container 200 Metered Sprays	12	SP
6505007542547	Atropine Sulfate Injection USP .4MG/ML 20ML Vial	2.5	ML
6135008357210	Battery Nonrechargeable 1.5V D Cell	2	EA
6135010631978	Battery Nonrechargeable 9V Dry Retangular	2	EA
6135009355301	Battery Nonrechargeable Dry C Cell	4	EA
6515011281407	Blood Recipient Set Indirect Transfusion Vent Y Type Disp		EA
6515010747812	Cannula Laryngeal Yankeur w/oCont Vent Str Distal End Disp	-	EA
6515013405429	Catheter & Needle Unit IV 14GA Beveled Tip Radpq	2	EA
6515013373681	Catheter & Needle Unit IV 18GA Beveled Tip Radpq	2	EA
6515012277037	Depressor Tongue 6IN LG Regualr Size Sterile	_	EA
6505001394460	Dextrose Injection Usp 50% 50ML Cartridge (Stocked in SST)	_	EA
6505001487177	Diphenhydramine HCI Inj 50MG/ML (Stocked in SST)	2	EA
6515012478232	Disc Adhesive 1.25IN Diameter 11/32 Aperture Dbl-Faced	1	EA
6515011602537	Electrode Electrocardiograph Plas Disp Prejelled Adhesive Bach	3	EA
6505013859409	Ephedrine Sulfate 50MG/ML Ampules 100s	50	MG
6505010932384	Epinephrine Injection USP 0.1MG/ML Syringe-Needle Unit 10ML	1	EA
6505010731316	Fentanyl Citrate Injection USP .05MG/ML 5ML Ampule	4	AM
7540006344157	Form Printed Anesthesia 10.5x8IN	1	EA
6515013648553	Glove Patient Exam/Treatment Med Prepowdered Latex	2	$\mathbf{E}\mathbf{A}$
6515012767970	Intravenous Exchange Set 8.5FR ID Cath 2.5IN LG Disp		EA
6515011050614	Intravenous Injection Set 12 Component Nonvented Ster	2	EA
6505010197627	Glycopyrrolate Injection USP .2MG/ML 20ML	5	ML
6501011179832	Isoflurane USP 100ML	125	ML

Task: 530 Induce/Maintain General Anesthesia (cont.)

NSN	Nomenclature	Quantity	UM
6505013391909	Ketamine Hydrochloride Injection USP 10ML Vial	3	ML
6505012447982	Labetalol Hydrochloride Injection USP 5MG/ML 20ML Vial	∞	ML
6505005986117	Lidocaine Hydrochloride Injection USP 2% 20MG/ML 20 Vial	10	ML
6505011253253	Mannitol Injection USP 25% 50ML Single Dose Vials	4	ML
6505012444736	Midazolam Hydrochloride Injection 5MG/ML 1ML Vial	2	MG
6505008122596	Morphine Sulfate Injection USP 10MG/ML Ampule	4	AM
6505000797867	Naloxone Hydrochloride Injection USP .4MG/ML 1ML Ampule	_	AM
6515007542836	Needle Hypodermic C13A GP 20GA 1.4-1.5IN LG Luer Lock	4	$\mathbf{E}\mathbf{A}$
6505009586325	Neostigmine Methylsulfate Injection USP .1% 10ML Vial	5	ML
6505001301940	Nitrous Oxide USP Size M Cylinder 2000GL		$\mathbf{E}\mathbf{A}$
6505001325181	Oxygen USP 99% Cylinder Type D 95GL	170	ΓT
6505001325199	Oxygen USP 99% Cylinder Type H 1650GL	170	LT
6510007863736	Pad Isopropyl Alcohol Impreg Cotton/Rayon 2.6INx2IN	3	EA
6505001049320	Phenylephrine Hydrochloride Injection USP 1% 1ML Ampules	_	AM
6505013306267	Ringer's Lactated Injection USP 1000ML Bag	9	EA
6505010880499	Scopolamine HydrobromideInjection USP 0.4MG/ML 1ML Vial	2	VI
6505013628311	Soda Lime NF 2.5LB Cartridge 12s	7	$\mathbf{E}\mathbf{A}$
66505013306269	Sodium Chloride Injection USP 0.9% 1000ML Bag	2	EA
515010357962	Stopcock Intravenous Therapy 3-Way Plas Disp	-	EA
6515013948327	Stylet Tracheal Tube 7.5-10MM Plastic Ster Disp	2	$\mathbf{E}\mathbf{A}$
6505010282260		140	MG
6515007540412	Syringe Hypodermic GP 10-12ML Luer Slip w/oNeedle	2	EA
6510009268882	Tape Adhesive Surgical Pourous Woven Rubber 11Nx10YDS	1	RL
6505010410558	Thiopental Sodium for Injection USP 500MG Vial	350	MG

Task: 530 Induce/Maintain General Anesthesia (cont.)

NSN	Nomenclature	Quantity	UM
6515011295437	Tube Airway Nasopharyngeal Argyle 28FR 6.9x9.3MM Curved		EA
6515011295439	Tube Airway Nasopharyngeal Argyle 32FR 10.16MM OD 7.9 ID	1	EA
6515011649637	Tube Airway Oropharyngeal 4" Airway/Cut-Away Flange	_	EA
6515009262205	Tube Coiled Blood Warming 4IN Dia .120IN ID Plas Ster Disp	<u></u>	EA
6515013851697	Tube Drainage Surgical Penrose Amber Rubber		EA
6515012259716	Tube Endobronchial Left Mainstem Bronchus E5 Dbl Lumen 39FR	۲ 1	EA
6515001050744	Tube Endotracheal w/Cuff 7.0MM ID 30CM LG w/15MM Conn	_	EA
6515001050759	Tube Endotracheal w/Cuff 8.0MM ID 10.7MM Dia 32CM LG		EA
6515012478925	Tube Extension Injection Set 30IN Male/Female Luer 2 Inj Sites	2	EA
6515013896158	Tube Suction Surgical Poole Open End Tip 72IN Plas Clear		EA
6505012892004	Vecuronium Bromide for Injection 10MG/ML 10ML Vial	20	MG

Task: 533 Induce/Maintain Nerve Block

NSN	Nomenclature	Quantity	UM
6505011277946	Bupivacaine Hydrochloride Injection USP .5% 30ML Vial	50	ML
6515013405429	Catheter & Needle Unit IV 14 GA Beveled Tip Radpq	1	EA
6515013373681	Catheter & Needle Unit IV 18 GA Beveled Tip Radpq	2	EA
6515011602537	Electrode Electrocardiograph Plas Disp Prejelled Adhesive Back	3	EA
6505001334449	Epinephrine Injection USP Aqueous Cartridge-Needle Unit 1ML		EA
6515013648553	Glove Patient Exam/Treatment Med Prepowdered Latex	2	EA
6515011050614	Intravenous Injection Set 12 Component Nonvented Ster	2	EA
6505005986117	Lidocaine Hydrochloride Injection USP 2% 20MG/ML 20 Vial	50	ML
6505012444736	Midazolam Hydrochloride Injection 5MG/ML 1ML Vial	5	MG
6515007542836	Needle Hypodermic C13A GP 20GA 1.4-1.5IN LG Luer Lock	4	EA
6515011039996	Needle Spinal Anesthesia Leur Lock 22GA 3.5"LG		EA
6515007863736	Pad Isopropyl Alcohol Impreganated Cotton/Rayon 1.5x2"	1	EA
6505013306267	Ringer's Lactated Injection USP 1000ML Bag	1	EA
6515010357962	Stopcock Intravenous Therapy 3-Way Plas Disp	2	EA
6515007540412	Syringe Hypodermic GP 10-12ML Luer Slip w/oNeedle	2	EA
6515014123101	Syringe Hypodermic GP 20 ML Luer w/oNeedle	3 .	EA
6505011533015	Tetracaine Hydrochloride USP 20MG Ampule	5	AM
6505010410558	Thiopental Sodium for Injection USP 500MG Vial		VI
6515012478925	Tubing Extension Inj Set 30"LG Male/Female 2 Inj Sites Plas	-	EA

Task: 535 Induce/Maintain Spinal Anesthesia

NSN	Nomenclature	Quantity	UM
6515011562494	Anesthesia Set Spinal 15 Components w/Tray Sterile Disp	_	EA
6505012125338	Bupivacaine in Dextrose Injection USP 2ML Ampule		AM
6505007540374	Povidone-Iodine Topical Solution USP 1GL	0.5	ZO

Task: 537 Recovery/Release from Anesthesia

	Nomenclature	Quantity	M
0105LF2063281	NAVMED 6320/16 (Recovery Room Form)		EA

Consumable Requirements for Operating Room Tasks Appendix D

Task: 344 Patient Preparation in the Operating Room

Procedure-Specific Consumables

UM

Quantity

(See Basic Set-Up Consumables List, Appendix D-1 - D-2)

Nomenclature

NSN

Appendix D Consumable Requirements for Operating Room Tasks

Task: 351 Operating Room Team Preparation

Procedure-Specific Consumables

OM Quantity Nomenclature NSN

(See Basic Set-Up Consumables List, Appendix D-1 - D-2)

Appendix D Consumable Requirements for Operating Room Tasks

Task: 354 Operating Room Clean-Up

Procedure-Specific Consumables

NSN	Nomenclature	Quantity	NM
6840005261129	Disinfectant-Detergent GenPurpose Iodine Concentrated 1GAL	-	EA

Appendix D Consumable Requirements for Operating Room Tasks

Task: ZZ18 Clean/Sterilize Instruments

Procedure-Specific Consumables

NSN	Nomenclature	Quantity	UM
6850010735955	Cleaner & Lubricant Surgical Instument 160Z Can	3	OZ
6840005261129	Disinfectant-Detergent GenPurpose Iodine Concentrated 1GAL	1	EA
6530000797039	Indicator Sterilization	3	$\mathbf{E}\mathbf{A}$
6530012422337	Tape Sealing Sterilization Indicator Steam 2160x1IN	0.25	RL
6530001276612	Wrapper Sterilization Blue Nonwoven Fabric 24"sq	9	$\mathbf{E}\mathbf{A}$
6530010862464	Wrapper Sterilization Blue Polypropolene 54IN Sq Disp	9	EA

Appendix E Proposed AMAL 640 - Operating Room Consumables

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6505002998179	*Albumin Human USP 25% 100ML Can Albuterol Inhalation Aerosol 17cm Container 200 Sprays	20.00	CN	0.940	0.031
6505007542547	Atropine Sulfate Injection USP .4Mg/Ml 20Ml Vial	12.0	VI	0.140	0.005
6505011277946	Bupivacaine Hydrochloride Inj USP .5 % 30Ml Vi 10s	0.20	PG	1.900	0.050
6505012125338	Bupivacaine in Dextrose Inj USP 2Ml Ampul 10/Pg	1.00	PG	0.152	0.079
6505010100832	Cefazolin Sodium Sterile USP Equiv to 1Gm Cefazolin	4.00	BT	090.0	0.003
6505011046393	Cefoxitin Sodium Sterile USP 2Gm Vi 25/Pg	0.40	PG	1.670	0.083
6505011875540	Clindamycin Phosphate Injection USP 6MI Vi 25/PG	1.00	PG	1.050	0.042
6505010932384	*Epinephrine Injection USP .1Mg/Ml Syringe/Needle Unit	1.00	PG	1.600	0.140
6505012385634	*Epinephrine Injection USP 1:1000 Syringe/Needle Unit	2.00	PG	0.030	0.003
6505013859409	*Ephedrine Sulfate 50MG/ML Ampules 100s	1.00	PG	1.350	0.015
6505010731316	Fentanyl Citrate Injection USP 5Ml Ampul 10/Box	1.00	PG	0.330	0.014
6505010197627	Glycopyrrolate Injection USP .2Mg/Ml 20Ml	00.9	BT	0.170	0.006
6505008542504	Halothane USP 125MI	3.00	BT	1.000	0.029
6505001539740	Heparin Sodium Injection USP 1000 Units/MI 10MI	2.00	VI	0.110	0.004
6505011179832	Isoflurane USP 100Ml	3.00	BT	0.140	0.005
6505013391909	Ketamine Hydrochloride Injection USP 10Ml Vi 10/Pg	0.50	PG	0.050	0.002
6505012447982	Labetalol Hydrochloride Injection USP 5Mg/Ml 20Ml Vi	2.00	VI	0.117	0.004
6505005986117	Lidocaine Hydrochloride Injection USP 20Ml Vial	5.00	VI	0.160	0.006
6505001538809	Lubricant Surgical 4 Oz (113.4Gm)	2.00	TU	0.350	0.015
6505011253253	Mannitol Injection USP 25% 50Ml Single Dose 25Vi/Pg	1.00	PG	6.750	0.182
6505012444736	Midazolam Hydrochloride Injection 5Mg/Ml 1Ml Vi 10/Pg 1.00	1.00	PG	0.180	0.008
6505008122596	Morphine Sulfate Injection USP 10Mg/Ml 1Ml Amp 25/Pg 1.00	1.00	PG	0.250	0.013
6505000797867	Naloxone Hydrochloride Inj USP .4Mg/Ml 1Ml Amp 10/Bx1.00	κ1.00	BX	0.120	0.050
6505009586325	Neostigmine Methylsulfate Injection USP 10Ml Multidose 10.0	10.0	VI	0.100	0.003
6505001301940	Nitrous Oxide USP Size M Cylinder 2000Gl	1.00	EA	109.5	2.000

^{*} Items added to upgrade clinical capability

Appendix E Proposed AMAL 640 - Operating Room Consumables

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6505001325181 6505001325199	Oxygen USP 99% Cylinder Type D 95Gl Oxygen USP 99% Cylinder Type H 1650Gl	2.00	EA EA	13.00	0.300
6505001049320	Phenylephrine Hydrochloride Injection USP 1% 1Ml 25s	1.00	BX	0.420	0.028
6505007540374	Povidone-Iodine Topical Solution USP 1GI (3.780Li)	4.00	BT	10.00	0.300
6505013306267	Ringer's Injection Lactated USP 1000MI Bag 12/Pg	10.0	PG	6.550	0.115
6505010880499	*Scopolamine Hydrobromide Inj USP .4Mg/Ml 1Ml Vi 25s	1.00	PG	0.400	0.012
6505013628311	Soda Lime NF 2.5Lb Cartridge 12/Pg	0.50	PG	35.00	1.000
6505013306269	Sodium Chloride Injection USP 1000Ml Bag 12/Pg	1.00	PG	7.100	0.116
6505013308926	Sodium Chloride Irrigation USP .9% 1000Ml Bag 16/Pg	3.00	PG	5.350	0.116
6505010282260	Succinylcholine Chloride Sterile USP 1Gm Cont 12/Bx	1.00	PG	0.420	0.033
6505011533015	*Tetracaine Hydrochloride Injection 20Mg Amp 100s	0.10	PG	2.830	0.167
6505010410558	Thiopental Sodium for Injection USP 500Mg Vi 25/Pg	1.00	PG	0.280	0.020
6505012144500	*Thrombin USP Bovine Derived 20k Units w/Transfer Dev	00.9	PG	0.600	0.038
6505000655220	Vancomycin Hydrochloride Sterile USP Equiv to 500Mg	10.0	VI	0.095	0.004
6505012892004	Vecuronium Bromide Injection 10Mg/Ml 10Ml Vi 10/Pg	2.00	PG	0.950	0.070
6510013414509	*Adhesive Tape Surgical Silk White 1INx10YDS 12s	2.00	PG	1.410	0.050
6510012624495	*Adhesive Tape Surgical Silk White 2INx10YDS 6s	2.00	PG	1.280	0.064
6510009268884	Adhesive Tape Surgical Porous Woven 3INx10YDS 4s	3.00	PG	1.200	0.050
6515011295437	Airway Nasopharyngeal Argyle 28Fr 6.9x9.3mm Crvd Plas	s 1.00	PG	0.250	0.001
6515012346838	Applicator 6"LG Cotton or Poly Squared Off Tip Disp	1.00	PG	0.140	0.013
6515011295439	Tube Nasophyaryngeal Argyle 32Fr 10.16x7.9mm Plas 10s 1.00	31.00	PG	0.010	0.001
6515011649637	Airway Pharyngeal 4" Flange Kink Res 30Fr 30s	1.00	PG	1.000	0.010
6515011562494	Anesthesia Set Spinal 15 Comp w/Tray Ster Disp 10s	1.00	PG	7.000	1.090
6515012346838	Applicator Wood or Plastic 6" Squared Off Disp 100s	1.00	PG	0.140	0.013
6530011075798	Bag Sterilization-Biohazard Disposal 36x24" Sgl Wall 200s1.00	s1.00	PG	17.00	0.435
6515012968429	Bag Suction Apparatus Surgical	2.00	EA	0.010	0.001

^{*} Items added to upgrade clinical capability

Appendix E Proposed AMAL 640 - Operating Room Consumables

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6515013526420 NSN PENDING	Ball Joint External Fixation Ortho 5-Hole Qty Evenly Spc *Bandage Cast Polymer Splinting Material 6"x15"	2.00	EA BX	0.010	0.001
NSN PENDING	*Bandage Elastic Coban Flesh/Camo 3"x5Yd 24s	2.00	PG	1.190	0.103
6510008172632	Bandage Felt Ortho White Nonster Rolled 6"x4Yd 36s	5.00	PG	7.750	2.400
6510000583047	*Bandage Gauze Kerlix 4.5"x5Yd 100s	1.00	PG	1.500	0.026
6135008357210	Battery Nonrecharg 1.5V Cylindrical D-Cell 12s	4.00	PG	3.500	0.027
6135009355301	Battery Nonrecharg 1.5V Cylindrical C-Cell	2.00	PG	0.300	0.004
6515010882616	*Blade Electrode Electrosurg 1" CRS Plas Shank 144s	1.00	PG	0.050	0.002
6515012812858	*Blade Extended Electrosurg Electrode 6" Disp 40s	1.00	PG	0.030	0.001
6515010095295	Blade Surg Knife Det #10 Small Tang 150s	1.00	PG	1.050	0.045
6515010095293	Blade Surg Knife Det #15 Small Tang Steel 150s	1.00	PG	1.120	0.045
6515011281407	Blood Recipient Set Indirect Transfusion Y Type Nontox	1.00	PG	8.000	1.400
6530013624977	*Bottle Spray 16 Oz Plas	2.00	EA	0.010	0.001
6530011642727	*Brush Surgical Scrub 3" Shoe Hdl w/Hexachlor Disp 144s	1.00	PG	1.000	0.005
6515010747812	Cannula Laryngeal Yankauer w/o Cont Vent Str Distal End 0.50	10.50	PG	5.500	0.900
6532000048055	Cap Operating Surg Surgeons Univ Sz Rayon Disp 100s	2.00	PG	0.010	0.001
6515004588411	Catheter & Conn Suct Trach 14Fr Whistle Tip 2 Eyes 50s	1.00	PG	3.550	0.623
6515013405429	Catheter & Ndl Unit IV Beveled Tip Radpq Plas Hub 200s	1.00	PG	4.000	0.400
6515011399050	Catheter Cardio Fogarty Embolectomy 4Fr 80Cm 1Ml Syr	1.00	EA	0.010	0.001
6515011774924	Catheter Cardio Fogarty Embolectomy 6Fr 80Cm	5.00	EA	0.110	0.004
6515001490104	Catheterization Kit Urethral w/Bot Outlet Drain Bag 16Fr	5.00	EA	0.710	0.254
6510010854742	Cellulose Oxidized Regen 8x4" 1-Ply 24s (Surgicel TM)	1.00	PG	0.500	0.050
6850010735955	Cleaner & Lubricant Surg Instrument 16 Oz Can 6s	1.00	PG	5.000	0.400
6515011399104	*Clip Hemostatic Lrg Color Coded Sterile 108s	1.00	PG	0.040	0.500
6515011399084	*Clip Hemostatic Med Color Coded 12mm 216s	1.00	PG	0.360	0.052
6515011738925	*Clip Hemostatic Tantalum 216s	1.00	PG	0.360	0.052

^{*} Items added to upgrade clinical capability

Appendix E Proposed AMAL 640 - Operating Room Consumables

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit
6510010701494	*Collagen Hemostatic Powder Ster Topical 1Gm Jar 12s	2.00	PG	3.000	0.080
6515009269201	Connector Tubing Str A18 Taper Serrations 3.5"	1.00	PG	0.650	0.060
6515012277037	*Depressor Tongue 6" Ster Disp 100s	1.00	PG	0.690	0.036
6515012478232	Disc Adhesive Aperature Double Faced 612s	1.00	PG	0.500	0.063
6840005261129	Disinfectant-Detergent General Purpose Iodine Concen 1GI 2.00	12.00	BT	9.250	0.300
6530011832863	Disposal Container Hypo Ndl & Syr 6.9Qt Plas 12s	0.50	PG	13.00	4.300
6515013879496	Drain Surg Malecot C1 Wing Head 28mm 36Fr Adult 6s	1.00	PG	0.300	0.100
6515013414524	Drainage Kit Clo Suct Jackson-Pratt Radpq 7mm w/Drain	4.00	PG	0.310	0.600
6515010587450	Drainage Unit Pleural Cavity Plas Water-Seal 3 Cham 6s	0.50	BX	1.500	0.167
6530012708801	Drape Surg 126x86" Disp Ster 12" Center Opening 15s	1.00	PG	000.9	0.050
6530010324089	Drape Surg Nonwoven Fabric Disp 6'x44" 20s	2.00	PG	13.00	1.400
6515011602537	Electrode Electrocardiograph Disp Pregelled Adh Back	5.00	PG	0.500	0.000
6515011977649	Electrode Grounding Electrosurg Pregelled Self-Adh 50s	0.50	PG	2.100	0.150
6515013253715	*Fixation Device External Ster	5.00	EA	0.750	0.075
7540006344176	Form Printed SF 600 100s	1.00	HD	0.010	0.000
7540006344157	Form Printed Clinical Record Anesthesia 100s	1.00	HD	0.150	0.013
6510000802054	*Gelatin Sponge Absorb USP IS (Gelfoam) 6s	4.00	PG	0.390	0.134
6515013648553	Glove Patient Exam/Treat Med Prepwdr Snug Cuff 100s	1.00	PG	1.200	0.100
6515011498840	Gloves Surgeons Gen Surg Sz 7 Rbbr Prepwdr Ster 50Pr	2.00	PG	4.560	0.475
6515011498841	Gloves Surgeons Gen Surg Sz 7.5 Rbbr Prepwdr Ster 50Pr	3.00	PG	4.560	0.475
6515011498842	Gloves Surgeons Gen Surg Sz 8 Rbbr Prepwdr Ster 50Pr	2.00	PG	4.560	0.475
6515013882493	Handpiece Irrigator Surg w/Irrig Control & Suct Lumen	2.00	PG	0.750	0.160
6515013194059	Implant Arterial Plastic Str 70Cm Thin Walled	1.00	EA	2.000	0.300
6515012616896	Implant Mesh Polypropylene Surg 12x12" Nonabs 3s	2.00	PG	0.300	900.0
6515013758519	Implant Mesh Surg 12x12" Polyester Plas Autoclav 3s	1.00	PG	0.300	900.0
6530000797039	*Indicator Sterilization 250s	1.00	PG	0.380	0.012

^{*} Items added to upgrade clinical capability

Appendix E Proposed AMAL 640 - Operating Room Consumables

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6515012767970	Intravenous Exchange Set 8.5Fr ID Cath 2.5" Radpq 25s Intravenous Injection Set 12 Comp Nonvent Ster Disp 50s	0.10	PG PG	2.000	0.030
6515012321857	Ligature Umbilical Cotton Braided Ster 24s	2.00	PG	0.100	0.012
6515011656718	Loop Vascular Surg Rbbr Blue Oval Loop Blunt Rnd 10s	1.00	PG	1.000	0.036
6515007822621	Mask Surg Nonwoven Fabric Glass or Syn Fiber Filter 50s	5.00	PG	1.250	0.213
0105LF2063281	NAVMED 6320/16 Recovery Room Form	1.00	HD	0.000	0.000
6515007542836	Needle Hypo C13A GP 20Ga Luer Lock Reg Ster 100s	1.00	PG	0.760	0.044
6515011039996	Needle Hypo C20A Spinal Anes 22Ga Luer Lock Reg 25s	1.00	PG	0.500	0.025
6515012931880	Needle Suture French Spring Eye Sz2 B3 1/2 Cir 72s	1.00	PG	1.000	0.052
6515003509680	Needle Suture Keith Abdominal B% Straight 2.8"LG 6s	2.00	PG	0.020	0.001
6510007755706	Pad Abdominal 7.5x8" White 3-Layer Ster Seal Pkg 240s	1.00	PG	15.00	3.195
6510007863736		1.00	PG	0.500	0.100
6515011535294	*Pad Magnetic Needle & Blade 21/2x83/4 IN Disp 96s	1.00	PG	0.800	0.200
6510009862942	*Pad Nonadher 8x3" Nonwov Cotton Ster White 50s	1.00	PG	0.020	0.100
6515013148918	Pencil Electrode Electrosurg Str Shape 10' Cord 50s	1.00	PG	0.100	0.002
6515012423997	Pledget Suture Teflon Med Firm 1/2x1/8" 216s	1.00	PG	0.080	0.004
6515013882477	Pump Set Dual Spike Wound Debride System 10s	2.00	PG	0.800	0.108
6515013225898	Razor Surg Prep Plas Stationary Design Solid Hdl 100s	1.00	PG	0.010	0.001
6515011700642	*Shunt Carotid Bypass Tapered 17-10Fr Dia 5s	1.00	PG	0.050	0.003
6515010503557	*Skin Prep Kit Preop Ster 20s	2.00	PG	0.820	0.840
6510011603261	Sponge Laparotomy Disp Radpq 18x18" Prewashed 100s	1.00	PG	10.60	2.560
6510001161285	Sponge Surg Gauze Abs 4x8" White Radpq Ster 80s	1.00	PG	25.00	5.000
6510011397542	*Sponge Surg Rayon Radpq 1x3" White Strung 200s	1.00	PG	0.010	0.001
6515013354623	Staple Unit Surg Multifire GIA 60 w/60 Titanium Staples	1.00	PG	0.150	0.003
6515012525599	*Stapler Skin Surg Ster Disp Lightweight Staples Wide 6s	1.00	PG	0.010	0.001
6515013285220	Staple Unit Surg Titanium Med 3-5 Loading u/w TA-30	0.25	PG	1.200	0.500

^{*} Items added to upgrade clinical capability

Appendix E Proposed AMAL 640 - Operating Room Consumables

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6515013285219	Staple Unit Surg Titanium Med 3-5 Loading u/w TA-55 Stapler Surg 30 Hn Can Multifire TA w/30 Staples 3s	0.25	PG	2.000	0.500
6515013354625	Stapler Surg 55 Un Cap Multifire TA w/55 Staples 3s	2.00	PG	0.250	0.003
6515013354629	Stapler Surg 60 Un Cap Multifire GIA w/60 Staples 3s	0.50	PG	0.600	0.030
6510005593159	Stockinet Surg 25 Ydx4" Cotton Yarn White/Nat 25s	2.00	RO	3.000	0.217
6515010357962	Stopcock Intravenous Therapy 3-Way Plas Ster Disp 50s	1.00	PG	0.560	0.150
6515013948327	Stylet Tracheal Tube 7.5-10mm Trach Tubes Disp 10s	1.00	PG	2.100	0.021
6532004056009	Surgical Pack Gown & Towel Nonwov Ster Sz Lrg 28s	2.00	PG	17.00	2.130
6515012931888	*Suture Abs Gen Clo 0 18" Ndl CTX Pds Violet Mono 12s	2.00	PG	0.010	0.001
6515012552835	*Suture Abs Gen Clo 2-0 27" Ndl CT Vicryl 3s	12.0	PG	0.010	0.001
6515013429169	*Suture Abs GI 2-0 18" Ndl SH Plas 96s	1.00	PG	0.300	0.025
6515013365873	*Suture Abs Surg Liver 0 Sgl Arm 36" Gut Br Ndl CE-9 12s 2.00	s2.00	PG	0.150	0.008
6515012091168	*Suture Abs Surg Sutupak Unarm Coated Vicryl 3-0 432s	1.00	PG	1.000	0.050
6515010619871	*Suture Abs 3-0 30" Ndl SH B3 1/2 Cir Black Br 36s	1.00	PG	0.240	0.019
6515011433743	*Suture Nonabs Gen Clo 0 18" Pull Off Ndl Uncoated 24s	1.00	PG	1.000	0.065
6515013015252	*Suture Nonabs Neurosurg 4-0 18" Ndl TF Nurolon 24s	1.00	PG	0.150	0.010
6515013995911	*Suture Nonabs Surg GI & Neurosurgical 96s	1.00	PG	0.300	0.025
6515013553928	Suture Abs GI 3-0 1 27" Strand Ndl SH-1 Coated Vicryl	2.00	PG	0.240	0.019
6515013549470	Suture Abs OB/GYN 0 1 36" Strand Ndl CTX Vicryl 36s	3.00	PG	0.240	0.019
6515001395911	Suture Abs Surg Liver 1 Sgl Arm 3' Polyglycolic 36s	1.00	PG	0.530	0.049
6515013559786	Suture Abs Urological 2-0 1 27" Strand Ndl UR-5 Vicryl	4.00	PG	0.100	0.001
6515012174320	Suture Nonabs Cardio 5-0 18" Ndl RB-1 Blue 3s	1.00	DZ	0.080	0.012
6515011399090	Suture Nonabs Surg Cardio 6-0 Dbl Armed 30" Plas 3s	1.00	DZ	0.430	0.042
6515010758288	Suture Nonabs 2-0 2.5' Silk Black Unarmed Braid 36s	1.00	PG	0.210	0.021
6515000678243	Suture Nonabs 3-0 17 1.5' Unarmed Silk Black Br 36s	2.00	PG	0.390	0.041
6515013553908	Suture Nonabs 4-0 1 18" Strand NdI FS-1 Ethilon Nylon	1.00	PG	0.240	0.019

^{*} Items added to upgrade clinical capability

Appendix E
Proposed AMAL 640 - Operating Room Consumables

NSN	Nomenclature	Quantity	Unit Issue	Unit Weight	Unit Cube
6515007540412		2.00	PG	5.800	0.570
6515014123101	Syringe Hypo GP 20ML Cap Leur Lock w/oNdl	1.00	PG PG	1.200	0.011
6515002647644	Tape Sealing Sterilization Indicator Paper White 9s	1.00	PG	4.300	0.200
6515013874950	Tip Irrigator Surg Multi Orifices 4.5" Plas 10s	2.00	PG	0.100	0.001
6530001101854	Towel Pack Surg Blue/Gray or Grn Ster Disp 19x26" 96s	1.25	PG	000.6	0.900
6515009262205	Tube Coiled Blood Warming 4x120" Tube Ster Disp	15.0	EA	0.430	0.095
6515000992951	*Tube Connecting Surgical Apparatus 50s	1.00	PG	20.00	2.000
6515008669073	Tube Drainage Surg C18 Thoracic 36Fr Str 6-Eye 10s	1.00	PG	1.540	960.0
6515012259716	*Tube Endobronchial Left Mainstem Bronchus E5 39Fr	10.0	EA	0.030	0.002
6515012478925	Tube Ext Inj Set 30" Male/Fem Luer 2 Inj Site Plas 48s	1.00	PG	1.880	0.296
6515001490316	Tube Stomach Surg Salem E19 w/Funnel 16Fr 48" 50s	0.50	PG	4.000	0.700
6515013896158	Tube Suct Surg Poole Open End Tip 72" Plas Clear 50s	0.50	PG	21.00	1.450
6515001050744	Tube Tracheal Murphy E12 w/Cuff 30Cm w/15mm Conn	1.00	PG	1.000	0.050
6515001050759	Tube Tracheal Murphy E12 w/Cuff 32Cm 10s	2.00	PG	1.000	0.050
6515013908215	*Tube Tracheostomy Portex Cuffed 11mm 82"	10.0	EA	0.030	0.002
6515009269150	Valve Surg Drain Heimlich 4.5x1" Flutter Rbbr Ster 10s	2.00	PG	090'0	0.024
6515009652511	Wax Bone 57-62.8 Deg C Plastic Aluminum 2.5Gm Pk 12s 1.00	1.00	PG	0.250	0.019
6530001276612	Wrapper Sterilization Blue Nonwoven Fabric 24x24" 500s 1.00	1.00	PG	25.00	0.290
6530010862464	Wrapper Sterilization Blue 54x54" Polyprop 100s	1.00	PG	21.60	2.531

^{*} Items added to upgrade clinical capability

REPORT DOCUMENTATION PAGE

Form Approval OMD No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for receiving instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA. 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)

2. REPORT DATE

3. REPORT TYPE AND DATE COVERED

January 1998

Interim 97 Sep - 97 Dec

4. TITLE AND SUBTITLE Reducing the Logistical Footprint of Forward Resuscitative Surgical Units Using a Patient Driven Model of Clinical Events

5. FUNDING NUMBERS

Program Element: 63706 N

Work Unit Number: M0095.005 - 6510

6. AUTHOR(S) Michael R. Galarneau, Paula J. Konoske, Kristee E. Emens-Hesslink & Gerald Pang

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Naval Health Research Center P.O. Box 85122 San Diego, CA 92186-5122 8. PERFORMING ORGANIZATION NUMBER

Report Number 98-1

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

Office of Naval Research 800 N. Quincy Street Arlington, VA 22217-5660 10. SPONSORING/MONITORING AGENCY AND REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release: distribution is unlimited.

12b. DISTRIBUTION CODE

Α

13. ABSTRACT Moving towards a concept of medical organization that achieves the objectives of Marine Corps guidance such as Operational Maneuver from the Sea brings particular challenges when examining forward resuscitative surgical units. Surgical units must be small enough to perform abbreviated, staged surgical procedures in forward areas to accommodate today's operational requirements for greater mobility. The primary objective of this paper was to reduce the surgical footprint by developing a model of the far forward medical supply stream that linked specific clinical requirements to individual medical treatment items. One hundred fifteen clinical Subject Matter Experts (SMEs) with operational experience assisted in the development of Marine Corps specific surgical treatment profiles for 72 of the 350 DEPMEDS Patient Conditions (PCs). Medical consumables and equipment were then assigned to each of the operating room tasks, establishing the clinical requirement for each item. A patient generating model (PATGEN) was used to determine which PCs would present as candidates for forward surgery. This information was loaded into the model and used to generate the medical items required for the operating room equipment AMAL 639 and the operating room consumable AMAL 640. When compared to the current Marine Corps operating room AMALs, the proposed AMALs resulted in reductions of 15.0% in weight and 13.2% in cube for the equipment AMAL 639 and 22.4% reductions in weight and 36.3% in cube for the consumable AMAL 640. This approach, which also resulted in an increase in operating room clinical capability, produced an audit trail for each item that allows medical logisticians to substantially improve the AMAL configurations because only items that can be clinically related to a treatment task conducted in theater are considered for inclusion in the AMALs.

14. SUBJECT TERMS Authorized Medical Allowance Lists (AMAL), supply stream, logistics, medical resource allocation, supply configuration model, operating room, surgical company

15. NUMBER OF PAGES

82

17. SECURITY CLASS IFICATION OF REPORT

Unclassified

18. SECURITY
CLASSIFICATION
OF ABSTRACT
Unclassified

19. SECURITY
CLASSIFICATION
OF ABSTRACT
Unclassified

20. LIMITATION OF ABSTRACT

Unlimited

16. PRICE CODE

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89) Prescribed by ANSI std. Z-39-18 298-102